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**UNITED STATES DISTRICT COURT**  
**FOR THE NORTHERN DISTRICT OF CALIFORNIA**  
**SAN FRANCISCO DIVISION**

ANDREW OKUSKO, individually and on behalf  
of all others similarly situated,

Plaintiff,

v.

DYNAMIC LEDGER SOLUTIONS, INC., THE  
TEZOS FOUNDATION, KATHLEEN  
BREITMAN, ARTHUR BREITMAN, and  
TIMOTHY DRAPER,

Defendants.

Case No. 3:17-cv-06829-RS

**CLASS ACTION**

**DECLARATION OF ROSEMARY M. RIVAS  
IN SUPPORT OF PLAINTIFF'S MOTION  
FOR PRELIMINARY INJUNCTION**

**[This motion will be subject to an order  
shortening time pursuant to L.R. 6-1.]**

Date: January 11, 2018  
Time: 1:30 p.m.  
Judge: Hon. Richard Seeborg  
Crtrm.: 3, 17<sup>th</sup> Floor

1 I, Rosemary M. Rivas, declare as follows:

2 1. I am a member in good standing of the Bar of this Court, and a partner in the law firm  
3 of Levi & Korsinsky, LLP, counsel for Plaintiff Andrew Okusko in the above-captioned action. This  
4 declaration is based on my own personal knowledge and/or the firm's records of the matters stated  
5 herein and, if called upon, I could and would competently testify thereto.

6 2. I submit this declaration in support of Plaintiff's Motion for a Preliminary Injunction.

7 3. Attached hereto as Exhibit 1 is a true and correct copy of the "Tezos and Tezos  
8 Foundation Overview document" entitled "Tezos The self-amending cryptographic ledger" obtained  
9 from <https://www.tezos.com/faq>, on November 25, 2017.

10 4. Attached hereto as Exhibit 2 is a true and correct copy of the "Tezos Contribution and  
11 XTZ Allocation Terms and Explanatory Notes" used in connection with the Tezos initial coin offering  
12 which ran from July 1, 2017 through July 14, 2017.

13 5. Attached as Exhibit 3 is a true and correct copy of the "Fundraiser FAQ" obtained from  
14 [www.Tezos.ch](http://www.Tezos.ch) on November 19, 2017.

15 6. Attached hereto as Exhibit 4 is a true and correct copy of the "Report of Investigation  
16 Pursuant to Section 21(a) of the Exchange Act of 1934" concerning The DAO issued by the Securities  
17 and Exchange Commission on July 25, 2017.

18 7. Attached hereto as Exhibit 5 is a true and correct excerpt of the Reuter's online article  
19 entitled "Special Report: Backroom battle imperils \$230 million cryptocurrency venture," published  
20 on October 18, 2017, <https://www.reuters.com/article/us-bitcoin-funding-tezos-specialreport/special-report-backroom-battle-imperils-230-million-cryptocurrency-venture-idUSKBN1CN35K>.

22 8. Attached hereto as Exhibit 6 is a true and correct copy of a screenshot of the homepage  
23 of [www.tezos.com](http://www.tezos.com) taken November 25, 2016.

24 9. Attached hereto as Exhibit 7 is a true and correct excerpt of the Tezos's "Transparency  
25 Memo" obtained from <https://www.tezos.com/dls>.

26 10. Attached hereto as Exhibit 8 is a true and correct excerpt of the Mashable online article  
27 entitled "At \$200 million, Tezos ICO is already the biggest ever, and it's still going strong," published  
28 on July 5, 2017, <http://mashable.com/2017/07/05/tezos-ico-cryptocurrency-startup/#8V061VdqtZqh>.

11. Attached hereto as Exhibit 9 is a true and correct excerpt of the Hacked online article entitled “ICO Analysis: Tezos,” published on May 12, 2017, <https://hacked.com/ico-analysis-tezos/>.

12. Attached hereto as Exhibit 10 is a true and correct excerpt of the online post on Steemit from user “alao” entitled “Why I’m investing in the Tezos ICO despite my concerns,” published on June 29, 2017, <https://steemit.com/cryptocurrency/@alao/why-im-investing-in-the-tezos-ico-despite-my-concerns>.

13. Attached hereto as Exhibit 11 is a true and correct excerpt of the online blog post on Medium from user “zooko” entitled “Why I’m advising Tezos,” published on June 29, 2017, <https://medium.com/@zooko/why-im-advising-tezos-a8e04ec1d0d4>.

14. Attached hereto as Exhibit 12 is a true and correct copy of the Coindesk online article entitled “\$232 Million: Tezos Blockchain Project Finishes Record-Setting Token Sale,” published online on July 13, 2017.

15. Attached hereto as Exhibit 13 is a true and correct copy of the online CoinTelegraph article entitled “Tim Draper: There Was Nothing Secretive About Our Purchase of Tezos,” published online on Oct. 23, 2017.

16. Attached hereto as Exhibit 14 is a true and correct copy of the online blog post on Medium published by user “ArthurB” entitled “Tezos: Philosophy and Values,” published online on March 20, 2017.

17. Attached hereto as Exhibit 15 is a true and correct excerpt of the transcript from a Flux Podcast episode featuring an interview with Kathleen Breitman entitled “Kathleen Breitman – Tezos Unleashed,” published online on July 12, 2017, <https://blog.rre.com/14-kathleen-breitman-tezos-unleashed-d0921294ec91>.

18. Attached hereto as Exhibit 16 is a true and correct excerpt of an online blog post on Medium by user “Arthur B” entitled “The Path Forward,” published on October 18, 2017, <https://medium.com/@arthurb/the-path-forward-eb2e6f63be67>.

19. Attached hereto as Exhibit 17 is a true and correct copy of an online post from Niklas Nikolajsen entitled “Tezos Statement,” published on November 13, 2017.

22. Based on a quick search of the SEC’s EDGAR database, no registration statement was filed with the Securities and Exchange Commission regarding the Tezos Tokens and/or the Tezos initial coin offering. See <https://www.sec.gov/cgi-bin/browse-edgar?company=Tezos&owner=exclude&action=getcompany>.

/s/ Rosemary M. Rivas  
Rosemary M. Rivas

# EXHIBIT 1

# Tezos

The self-amending cryptographic ledger





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# EXECUTIVE SUMMARY

Tezos is a decentralized blockchain that governs itself by establishing a true digital commonwealth.

What's more, Tezos was built to facilitate formal verification, a technique which boosts the security of the most sensitive or financially weighted smart contracts by mathematically proving the correctness of the code governing transactions.

The Tezos blockchain will underpin secure, decentralized applications and smart contracts while avoiding some of the political and technological problems which earlier efforts such as Bitcoin and Ethereum have faced. Tezos was built on the belief that a deep commitment to security, formal verification, and governance that gives stakeholders the power to make protocol decisions is the formula for earning trust and generating widespread adoption on the blockchain.

This document provides a comprehensive overview of Tezos, its applications and benefits, the developers involved in the project, the upcoming Tezos fundraiser (sometimes loosely called "ICO" or "crowdsale"), the Tezos Foundation and the goals the Foundation hopes to achieve.





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tezos.com

# THE HISTORY OF THE TEZOS BLOCK-CHAIN

Work on Tezos began in 2014 by its founding development team, whose academic experience spans from philosophy to physics, mathematics and computer science, along with professional experience that includes positions at Goldman Sachs, Morgan Stanley, The Wall Street Journal, and Accenture. They recognized that decentralized blockchains share the same challenges that exist in any commons (the name economists give to a resource shared by several people), specifically that challenges around governance and maintenance often lead to stagnation, shortages, and political deadlock.

In the case of pioneers like Bitcoin and Ethereum, those challenges have manifested themselves in situations that put too much power in the hands of core development teams or miners. In other words, first-generation blockchains have become subject to a form of centralization that their developers sought to avoid.

During three years of development, the Tezos team sought to address the need for decentralized innovation in protocol design and emphasized the importance of formal verification in its software design philosophy.

**December 2013** - Gordon Mohr suggests NomicCoin on Twitter

**January 2014** - Independent formulation of this idea by L.M. Goodman

**March 2014** - Tezos development begins self-funded

**August 2014** - Tezos Position Paper is released

**September 2014** - Tezos White Paper is released

**January 2015** - Zooko becomes an advisor to Tezos

**August 2015** - Bitcoin XT proposed, the "block-size debate" begins putting governance on the front stage

**June 2016** - The DAO is hacked, a hard-fork of Ethereum is soon decided by the Ethereum Foundation

**June 2016** - The pre-fork Ethereum chain becomes Ethereum Classic and splits the network

**June 2016** - Andrew Miller joins as an advisor

**September 2016** - Arthur Breitman presents Tezos as StrangeLoop

**September 2016** - Polychain Capital and several individuals back Tezos to help scale up development

**February 2017** - Emin Gün Sirer joins as a technical advisor in an official capacity

**May 2017** - Tezos Foundation launches in Switzerland

**Summer 2017** - Tezos network launches





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# THE PRINCIPLES OF THE TEZOS BLOCKCHAIN

## 2.1 GOVERNANCE

While all blockchains offer financial incentives for maintaining consensus on their ledgers, no blockchain has a robust on-chain mechanism to seamlessly amend the rules governing its protocol and explicitly fund protocol development. As a result, first generation blockchains tend to empower, de facto, centralized core development teams or miners to formulate design choices.

Tezos takes a fundamentally different approach by **creating governance rules for stakeholders to approve of protocol upgrades that are then automatically deployed on the network**. When a developer proposes a protocol upgrade, they can attach an invoice to be paid out to their address upon approval and inclusion of their

upgrade. This approach provides a strong incentive to contribute efforts towards core development of the Tezos blockchain and further decentralizes the maintenance of the network. It compensates developers with tokens that have immediate value rather than forcing them to seek corporate sponsorships, foundation salaries, or work for Internet fame alone.

Tezos instantiates new technical innovations but can also enforce types of constitutionalism through the use of formal proofs to mathematically verify that key properties are upheld over time. By allowing stakeholders to coordinate on-chain, the network also allows for the creation of bounties to implement specific features or discover bugs. Collectively, the network maintains the decentralized aspect of blockchains while introducing

a mechanism to enable collective decision making. Tezos tokens not only power smart contracts in the network, but also allow votes on protocol amendments. The initial Tezos rollout is simple by design, but its self-amending nature means that the rules governing the network can be improved over time.

## 2.2 CORRECTNESS

Blockchains underpin billions of dollars of value with relatively small codebases, which puts them in the sweet spot for formal verification, a powerful technique that mathematically proves the correctness of computer programs. Formal verification has been used in the aerospace industry, in medical devices, and other instances where the stakes are too high to fail.



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### 2.2.1 OCAML IMPLEMENTATION

Formally verifying a complex piece of software is a sizable task, so the development team sought to simplify it as much as possible. To that end, we implemented Tezos in OCaml, a functional programming language that has been developed and maintained by the INRIA since 1996 (and itself based on earlier efforts). Its speed is comparable to that of C++ and it generally features among the fastest programming languages in benchmark testing. More importantly, OCaml is strongly typed and offers an impressive type inference system. Its expressive syntax and semantics, including powerful pattern matching and higher-order modules, make it easy to concisely and correctly describe the type of logic underpinning blockchain-based protocols. OCaml's semantic is fairly rigorous and a very large subset has been formalized, which removes any ambiguity as to what is the intended behavior of amendments. In addition, Coq, one of the most advanced proof-checking software tools, is able to extract OCaml code from proofs. As Tezos matures, it will

be possible to automatically extract key parts of the protocol's code from mathematical proofs of correctness.

### 2.2.2 MICHELSON

The correctness of smart contracts running on the Tezos blockchain is almost as important as that of the core protocol itself. Smart contract bugs can taint the reputation of the platform they operate on. To mitigate that risk, the development team designed our smart contract language with correctness and formal verification in mind.

Michelson is statically typed and purely functional. This design largely eliminates large classes of bugs such as the DAO reentrancy bug or the Solidity ABI vulnerability discovered by the Golem project. The language itself looks like a mix between Forth and Lisp and a reference is available [here](#). The Tezos development team has already successfully proven the correctness of Michelson contracts in Coq, including the multisig contract.

More information about these design choices are found in the Tezos [position paper](#) and [white paper](#).



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2.3 PROOF OF STAKE

In its initial incarnation, Tezos is launching with a delegated proof-of-stake consensus algorithm. This choice of consensus algorithm is amendable, on-chain, by the stakeholders. In principle, a proof-of-work consensus or even a federated consensus could take its place. However, the development team expects proof-of-stake to be an important part of the Tezos culture and thinks it will remain the primary consensus method.

Tezos’ delegated proof-of-stake system works by letting every stakeholder designate one or several delegates of their choice to create blocks and validate transactions on their behalf. The higher the stake delegated to a given validator, the more often will they be called upon to create blocks. **Though the Tezos system is delegated, every token holder can participate as a delegate regardless of the amount they hold.**

The network issues newly minted tokens as a reward to validators for the service they provide to the network. These rewards will create *nominal* inflation; **holders are free to be their own delegate if they so desire and thus to avoid any dilution.** It likely that large delegates will offer to share some of their profits in a bid to attract more stakes.

The computing requirements to become a validator are relatively lightweight (a few hundred watts at most) but a robust, high-speed Internet connection is required. Running a proof-of-stake node also requires more operational security than running a mining operation as it involves signing blocks with a private key on a machine connected to the Internet. This risk can be mitigated by the use of secure hardware components, as found in devices like the Trezor or the Ledger Nano S.



The development team expects proof-of-stake to be an important part of the Tezos culture and thinks it will remain the primary consensus method.





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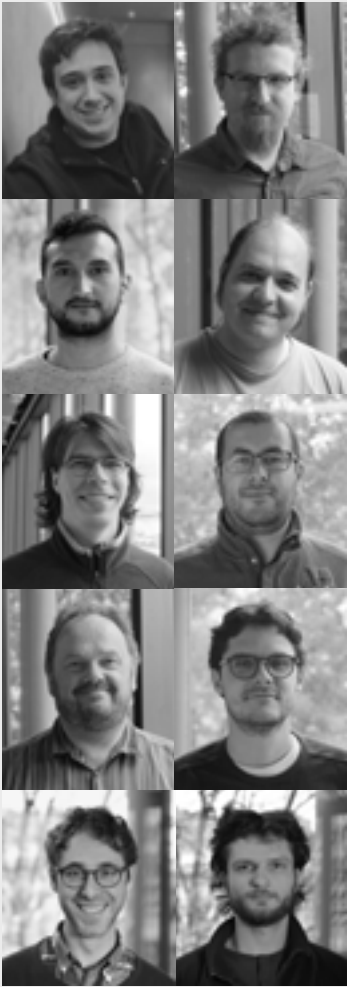
# PEOPLE AND ORGANIZATIONS INVOLVED WITH TEZOS

## 3.1 DYNAMIC LEDGER SOLUTIONS

The Tezos blockchain is primarily being developed by Dynamic Ledger Solutions, Inc. (“DLS”) a US-based company co-founded by Kathleen and Arthur Breitman.

Arthur was born in France and educated at École Polytechnique in math, physics, and computer science. He then went on to a career in quantitative finance, including positions at Goldman Sachs and Morgan Stanley. Kathleen holds a BA from Cornell University and worked at The Wall Street Journal, Bridgewater Associates, Accenture, and R3 prior to Tezos.

Kathleen met Arthur at a crypto-anarchist meetup in New York in 2010 and they’ve been together ever since.



## 3.2 THE DEVELOPMENT TEAM

Tezos is a small team. The philosophy behind the Tezos project dictates that the core team should not be the only contributors to the Tezos project. That being said, the original team will obviously play a critical role in growing and improving the network in its infancy.

There are currently ten core developers: Arthur Breitman, Benjamin Canou, Çağdaş Bozman, Pierre Chambart, Grégoire Henry, Mohamed Iguernlala, Fabrice Le Fessant, Alain Mebsout, Vincent Bernardoff, and Guillem Rieu.

Our development team is primarily located in Paris, France and has been working on the Tezos ledger through a partnership with OCamlPro, a software company with deep OCaml expertise founded by Fabrice Le Fessant. Most of our developers have Ph.Ds in Computer Science and expertise in programming language theory.



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3.3 THE TEZOS FOUNDATION

Tezos’ founders thought it that it would be beneficial for the the Tezos Network if a non-profit foundation could guide its early steps and complement the decentralized nature of its governance model. The Tezos Foundation is an independent Swiss entity whose goal is to promote and foster the use of the Tezos blockchain, its technology and its ongoing development.

Since the early days of the Tezos network are critical, the Tezos foundation will retain a veto power over protocol upgrades for a period of one year from minting the Genesis block. However, the Foundation does not and will not have any privileged power in proposing protocol upgrades. Any protocol upgrade proposed by the Foundation will need to be vetted and agreed upon by the stakeholders just as any other proposal would.

The members of the Foundation council are Johann Gevers, Diego Ponz, and Guido Schmitz-Krummacher. Johann Gevers is one of the founders of the Cryptovalley ecosystem in Zug, Switzerland, as well as the CEO of **Monetas**, a digital payments company based in Zug. Diego Ponz is a computer scientist and entrepreneur with an expertise in combinatorial optimization. Guido Schmitz-Krummacher is a businessman in the Zug area.

3.4 ADVISORS

Tezos advisors currently include:



**Zooko Wilcox**

*Computer scientist and the leader of the ZCash project.*

Additionally, Zooko is the designer of multiple network protocols and a member of the development team of ZRTP and the BLAKE2 cryptographic hash function.



**Emin Gün Sirer**

*Associate Professor at Cornell University.*

Gün’s research spans operating systems, networking, and distributed systems. He is a Co-Director of the Initiative for Cryptocurrencies and Contracts (IC3) at Cornell. Emin has made enormous contributions to the Bitcoin community through his work on vaults and selfish mining techniques.



**Andrew Miller**

*Assistant Professor at the University of Illinois, Urbana-Champaign in Computer Engineering and Computer Science.*

Andrew is also an Associate Director of the Initiative for Cryptocurrencies and Contracts (IC3) at Cornell and an advisor to the ZCash project. His research interests are broadly in computer security, and focused on the design of secure decentralized systems and cryptocurrencies.

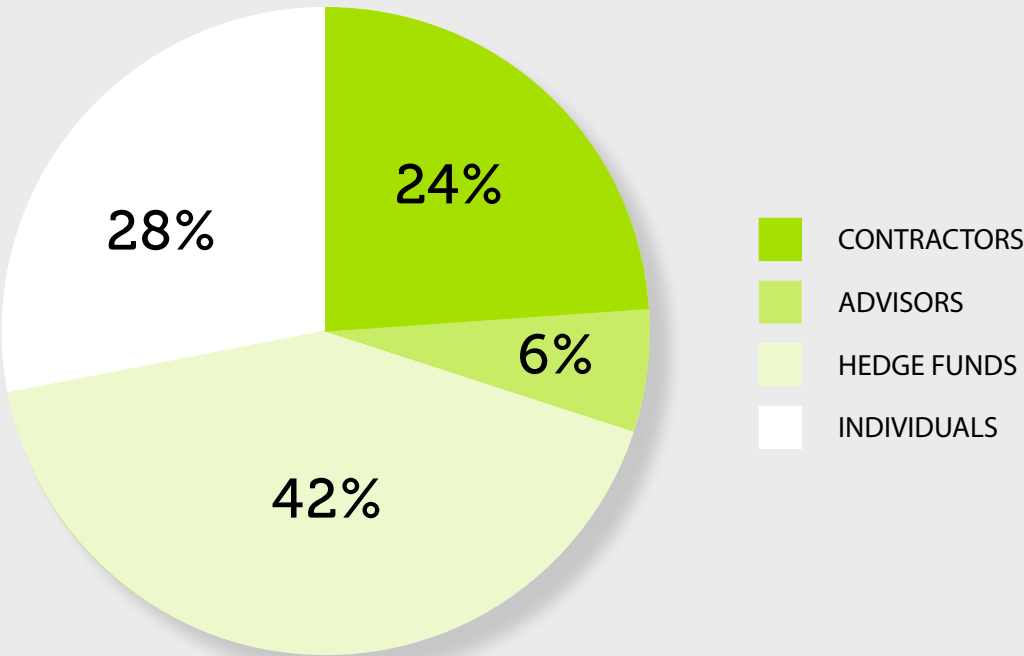


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### 3.5 EARLY BACKERS

In order to fund the last phases of Tezos’ development, the DLS team received backing from ten entities from September 2016 through March 2017. Three of these entities were hedge funds with a specific focus on tokens. The other seven backers were high net-worth individuals, or federations thereof, many of whom were also LPs of the hedge funds. Total early funding amounts to \$612,000. In order to value the early participants in this project, the Tezos Foundation will recommend an allocation of XTZ tokens equivalent to \$893,200.77 in contributions (corresponding to a 31.48% discount). No single backer represented more than 33% of the total amount.

DLS chose these backers strategically, with an emphasis on people and entities who were philosophically in-line with our uncapped fundraising structure and are long-term believers in the Tezos protocol, either based on their technical expertise or familiarity with the founding team.







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# FUNDRAISER

The Switzerland-based Tezos Foundation will oversee a fundraiser on July 1, 2017.

It will recommend a token allocation in the

Tezos genesis block based on contributions in bitcoins and Ethers (Please refer to the legal document that will be issued by the Foundation for more details.)

The Foundation will receive and manage all contributions on a

special website: <https://crowdfund.tezos.com> and through Bitcoin Suisse AG, a Swiss exchange that has successfully managed several fundraisers.





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4.1 SCHEDULE

Following the example set by the Ethereum Foundation, there is no cap on the amount of contributions that will be accepted by the Foundation. This is done in order to ensure that participation is not limited only to insiders or the “fast-fingered”. The Tezos development team believes that an un-capped fundraiser will promote a widespread distribution of the tokens, a necessary prerequisite to launching a robust network.

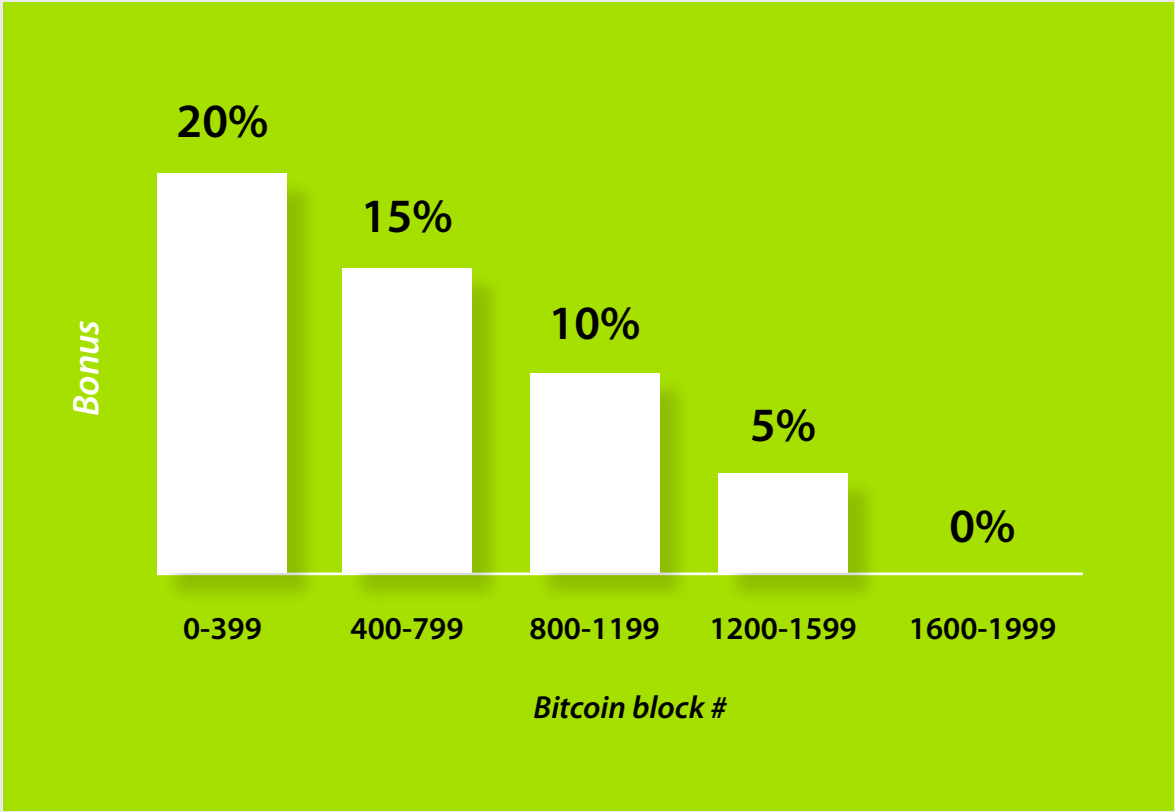
Though the amount of Tezzies allocated is denominated in bitcoins, contributions may be made in ethers, that will be implicitly converted at the prevailing rate on a best effort basis. Contributions may also be made through Bitcoin Suisse AG who accepts fiat currencies and other electronic tokens and will participate in the fundraiser on behalf of its customers.

The fundraiser will last for a period of 2,000 Bitcoin blocks. Throughout this period, a contribution of one bitcoin (1 XBT) will lead to an allocation of five-thousand tezzies (5,000 XTZ) plus

a time dependent bonus. This bonus is meant to incentivize contributors not to delay their participation. The bonus starts at 20%, meaning that a contribution of 1 XBT will yield an allocation of 5,000 X (1 + 20%) = 6,000 XTZ and decreases progressively to 0% over 5 periods lasting 400 Bitcoin blocks each.

The average time between Bitcoin blocks is approximately 10 minutes, thus the fundraiser is expected to last approximately two weeks, and each period of 400 blocks roughly two days and eighteen hours.

The Foundation will manage the proceeds of the fundraiser and sell contributions progressively throughout the fundraising period in order to reduce the risk inherent in holding cryptographic tokens.





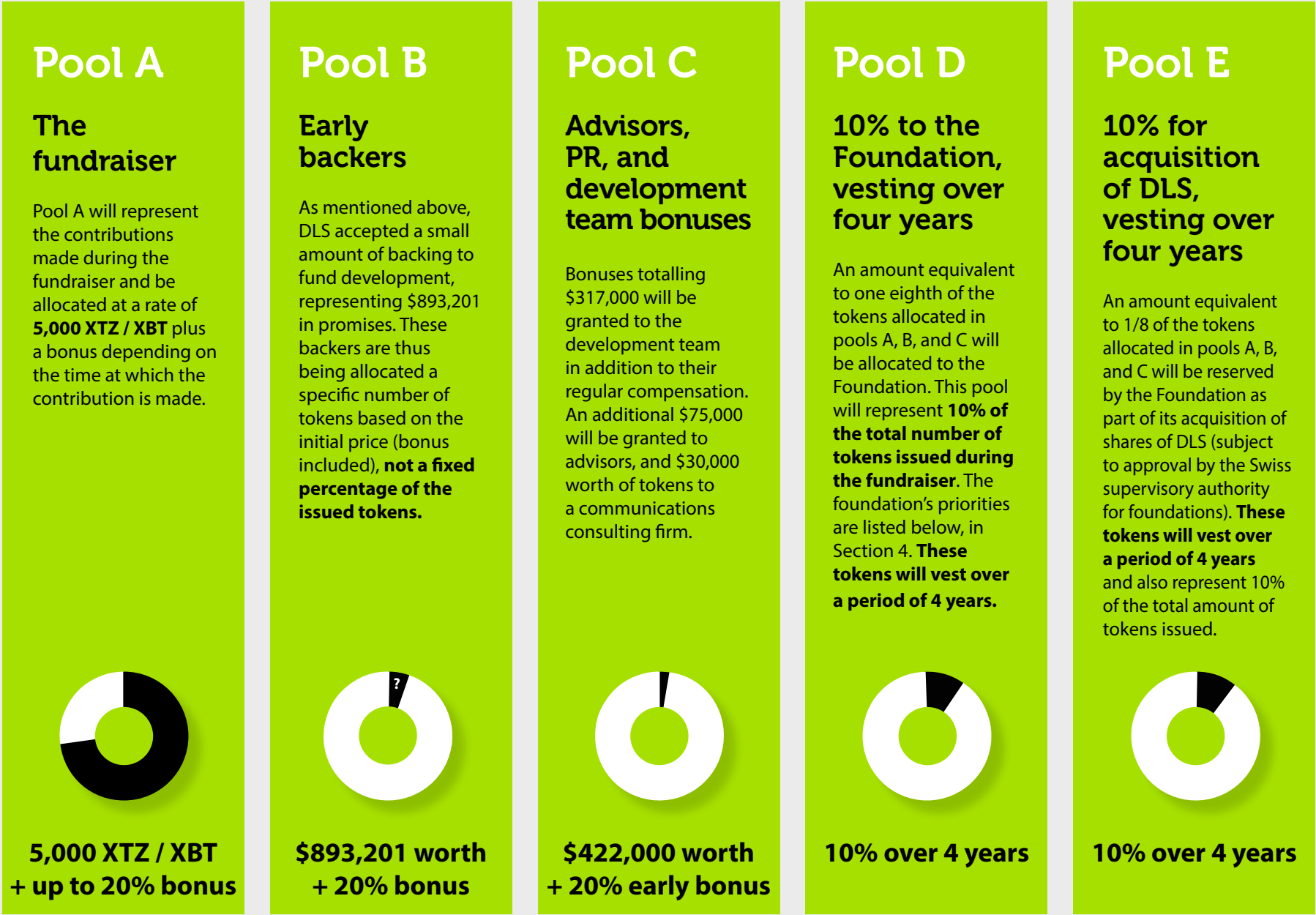


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4.2 RECOMMENDED ALLOCATION

The foundation will recommend allocation based on the following pools:





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# FOUNDATION PLANNING



A detailed layout based on different fundraising scenarios can be found in **THE TABLE**.

The Tezos Foundation will manage the contributions according to its purpose. Initially, the Foundation will budget from four to six years, depending on the amount raised. After this period, the Foundation will phase itself out unless the community votes to keep it in existence through funding via tokens.

The Foundation will have the discretion to pay for services it believes will benefit the promotion of the Tezos protocol, either in tokens or another currency. This section outlines initial team believes the Foundation should value, as well as the estimated costs for servicing each priority based on the proceeds of a fundraiser.

## 5.1 ENGINEERING

The primary task of the Foundation is to ensure the functionality of the network. To this end, the Foundation will, at a minimum, retain the original development team at the current annual cost of \$900,000. This will cover maintenance, as well as some integrations and proposals. Over four years, this will cost the Foundation \$3.6 million.

DLS partnered with OCamlPro, a company based in Paris with deep expertise in OCaml. Most of the developers working on Tezos have PhDs in formal verification and programming language theory.

## 5.2 RESEARCH

The Tezos protocol currently benefits from research in the formal verification and programming language communities at no cost. The initial development team of Tezos has a strong philosophical commitment to formal verification and a keen interest in researching new consensus algorithms for blockchains. The Foundation will look to fund research in this area with its endowment from the fundraiser.



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### 5.3 LEGAL SERVICES

Currently, Doug Barnes works on behalf of Dynamic Ledger Solutions, the company developing Tezos, through **Barnes Legal**. In addition to his legal qualifications, Doug was also involved in the cypherpunk movement in the early 90s. The Swiss law firm **MME** represents the Tezos Foundation and will continue to do so after the token generation event.

### 5.4 COMMUNICATIONS AND MARKETING

Currently, DLS retains communications consultancy to support its marketing efforts. As stated in the original Tezos whitepaper, DLS believes that the advocacy and marketing of protocols are integral to gaining greater acceptance of them from a wide community.

The Foundation exists to drive an ecosystem around the Tezos protocol. Similar projects have seen extraordinary success from

running meetups across the world. The Foundation will target New York, Tokyo, and Paris for events and meetups.

In the spirit of community building, the Foundation will also provide a forum attached to the [www.tezos.com](http://www.tezos.com) domain that can facilitate debate on proposals. This isn't meant to be the only forum for discussion and posts will be moderated to weed out abusive actors. Though the Tezos community will converge on a place to discuss proposals, it makes sense for the Foundation to spend a modest amount to create and moderate a potential option.

### 5.5 BUSINESS DEVELOPMENT

Non-engineering Tezos protocol efforts entail managing potential partnerships, marketing, financial transactions, and business operations broadly construed. It will soon be necessary to solicit more business development people to interface with non-technical stakeholders, as well as help manage Tezos vendors and contractors.



The Foundation exists to drive an ecosystem around the Tezos protocol. It will target New York, Tokyo, and Paris for events and meetups.



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# LONG-TERM GOALS

Though our philosophy and governance model constrains how prescriptive the Foundation and the initial team can act, we thought it was worth documenting the types of things the Foundation will work to realize within the Tezos community.

## 6.1 COMMUNITY GOALS

Since Tezos has a built-in governance mechanism, its protocol can evolve and incorporate new innovations over time. In other words, stakeholders can make and enforce decisions about changes to the network using the network itself.

All protocol changes should go through the Tezos internal governance mechanism when possible. If a person or party introduces a change via a hard fork, but that change could easily have been instigated inside of Tezos, the network should reject that change and treat it as illegitimate.

However, some decisions will inevitably arise at a level that cannot be fully addressed within the network. The founding team would like to have a certain ethos govern the network. Namely, they believe the central goal of the governance mechanism is to protect the interest of each token holder, irrespective of their stake, in their capacity as a token holder.

Generally speaking, this would mean favoring decisions that tend toward increasing the value of the tokens. Not only does this directly benefit token

holders, but it also acts as a proxy for the most desirable properties, such as security, fairness, or usefulness. The ideal Tezos community would be intellectually rigorous without sacrificing pragmatism and inclusive without tolerating belligerence. There would be a focus on experimentation, testing, and folding in the most useful and innovative technical tools for the community to use. The Foundation does not endorse or look to facilitate any immoral behavior such as fraud or the instigation of violence on other beings or entities.

Tezos should be comprised of a community of serious thinkers, focused on preparing the most effective upgrades to increase the utility of the Tezos token. The network will reward these proposals by issuing them new tokens upon acceptance, creating a robust pecuniary incentive.



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6.2 DEVELOPMENT GOALS

The development goals of Tezos follow five axes: security, scaling, privacy, usability, and features. The development team will pursue all five goals somewhat in parallel but not with the same priority.

security  
scaling  
privacy  
usability  
features

6.2.1 SECURITY

Tezos is built on a fresh code base. This let the development team control every aspect of the initial design and benefit from the advanced safety features of OCaml, but it also means that the system hasn't been battle-tested yet. Both Bitcoin and Ethereum successfully recovered from critical bugs in their code base, but such crises should be avoided as much as humanly possible. Therefore, the development team's primary focus will be to continuously work to improve the resilience of the network to DDOS attacks or malicious fork. Every other effort on the ledger is for naught if the core team fails to properly secure the network. Concretely, they will:

- *Keep increasing the test coverage of the code base*
- *Develop formal proofs of correctness for the most sensitive parts of the code*
- *Submit security upgrades to the protocol as needed*
- *Improve the randomness generation protocol with public verifiable secret sharing*
- *Release security upgrades to the block creation software*
- *Produce recommendations for operational security of block validators*

6.2.2 SCALING

The Tezos proof-of-stake algorithm affords us better scalability and transaction throughput that can be achieved with Bitcoin style proof-of-work. However, the initial parameters are set very conservatively in order to let us assess its performance in the real world and allow the ecosystem of validators to grow. Once the ledger accumulates real world experience, the development team will work towards cranking up the transaction throughput by:

- *Increasing the block size*
- *Lowering the block time interval*
- *Packing transactions more efficiently*

Note that the consequences of increasing the blocks' size in proof-of-stake are very different from the consequences of increasing the block size in a Nakamoto proof-of-work systems. In Nakamoto proof-of-work any increase in block size gives a slight advantage to centralized miners. This is because proof-of-work requires the block propagation and validation time to be very small compared to the block interval. In synchronous proof-of-stake protocols like Tezos', it only needs to be smaller than the block interval.



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6.2.3 PRIVACY

Privacy preserving transactions and smart contracts are a key feature of modern blockchains. Not only are they a security requirement, they ensure censorship resistance much more effectively than any tweaking of the consensus algorithm.

However no solution is perfect yet. Ring signatures, as used in Monero, can still leak some information about senders. Zcash makes an impressive use of zero-knowledge proofs to provide full, information theoretic, anonymity, but the risk – however remote – of undetected hyperinflation in the event of a bug in the proof circuit makes some users uncomfortable.

Our initial plan is to strike a compromise and integrate Zcash’s proof circuit in the protocol, but restrict its operations to a special token issued on the Tezos blockchain. This token will be convertible 1 to 1 with Tezos tokens, but the chain will keep track of how many tokens have been converted so that undetected inflation in the privacy preserving token cannot spill over onto the main token. Users who trust the security of the privacy preserving token will have full use of its functionality while those who don’t will remain protected as long as they

do not make use of the privacy feature. This mechanism replicates the economic behavior of a side chain, but on a single ledger.

In the long run, the team intends to replace all operations on the blockchain with zero-knowledge proofs. Instead of downloading an entire blockchain a client will be able to download a single proof attesting that the entire blockchain has been validated starting from the genesis hash. However, to that end, they will likely make use of STARKs, zero knowledge proofs similar to SNARKs but which do not require a trusted setup.

6.2.4 USABILITY

Initially, the Foundation team’s primary task will be to build robust, scalable, and secure infrastructure. However, the development team also needs to make it an attractive platform. In particular, they will:

- *Develop light client libraries in most popular programming languages to help developers integrate with the Tezos network.*
- *Develop an IDE to facilitate development and formal verification in Michelson.*
- *Develop a certified compiler for a high-level language that will compile down to Michelson.*



Initially, the Foundation team’s primary task will be to build robust, scalable, and secure infrastructure.







- 1 HISTORY
- 2 PRINCIPLES
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### 6.2.5 FEATURES

“Features” are decentralized applications supported at the protocol level. In Ethereum, the prevailing trend is to deploy these “DApps” through App Coins, a way for developers to build specially marked tokens to power applications on an existing network which can be converted in-and-out of the main network token.

While Tezos permits the creation of App Coins, we do not focus on them. If an application is particularly valuable to the network, we believe it should be folded into the protocol. Though we do not know exactly yet which features will be voted into the protocol level by the network, some applications seem to have widespread appeal in similar projects: prediction markets, DNS systems, on-chain node identity, debt networks (à la Stellar), decentralized exchanges, file storage, and cloud computing. More exotic or specialized applications, such as the Numéraire project, are probably better fits for App Coins as they have less explicitly general appeal.

Unproven systems ought to innovate at the leaves, while tried-and-true features ought to have a way to make the network more valuable by integrating at the protocol level. This is not purely for the sake of creating more valuable networks but also for ensuring consistency of execution.

## 6.3 RESEARCH GOALS

The initial development team’s research goals represent longer term developments or ideas to push out of the lab and deploy.

### 6.3.1 ZERO-KNOWLEDGE PROOFS OF KNOWLEDGE

Right now, the Tezos development team is fascinated with a new development in zero-knowledge proofs: STARKs. Unlike SNARKs, STARKs do not require a trusted setup. They also rely on simpler mathematics and are more efficient to compute. However, the proof time of STARKs is still cumbersome.

### 6.3.2 PROOF-OF-STAKE

The team is interested in researching different proof-of-stake consensus algorithms offering stronger guarantees and scalability. This is a burgeoning field and interesting proposals such as Ouroboros, Algorand, Honey Badger and Snow White have been appearing at higher frequency.

### 6.3.3 INCENTIVE COMPATIBLE GOVERNANCE

Moving beyond technology, the Foundation will also try to sponsor research focusing on decentralized governance and incentive structures.

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IF THE FOUNDATION IS ENDOWED WITH...



Note: all amounts  
in \$1,000

	CURRENT	\$6,000+	\$12,000+	\$20,000+	MOONSHOT	MARS-SHOT
Engineering	Continue development with our current team.	Push work on v2 by the foundation. Attempt a secondary issuance in conjunction with the release of the new version.	Directly hire additional talent from ETH Zurich for full-time code maintenance in Switzerland.	Grow the team with other experienced, academically oriented engineers.	Hire talented teams of engineers and designers to build direct consumer applications through strategic acquisition of tech companies.	Deploy and silo several teams of engineers to build different candidates for upgrades. Evaluate empirically the best proposals and merge them.
Headcount	6	6	10	15		
Yearly rate	\$900	\$900	\$1,500	\$2,250		
Research	Continue our use of PhD candidates to work on formal verification.	Keep our current approach, strategically engage the formal verification community.	Contract a team of academics to research and help build v2 consensus algorithm, followed by research on zk-STARKs.	In addition, join the IC3 team as a sponsor.	Offer competitive salaries to attract experts on formal verification to work exclusively on the protocol. Set up an institution a la IC3 in Europe.	Sponsor a leading computer science department with endowed professorships and extensive grants to graduate students in the field of formal verification.
Yearly rate	\$0	\$0	\$300	\$700		
Communications & Marketing	Continue working with our communications consultancy.	Continue working with our communications consultancy.	Host an annual developer conference in Europe and retain current communications consultancy.	Conduct three annual developer conferences (EU, US, Asia), retain current communications consultancy, run ad campaigns.	Sponsor an online magazine to cover major debates. Pay to publish a hash of the Tezos blockchain in a reputable outlet like the Financial Times or The New York times (à la Guardtime).	Acquire mainstream print and TV media outlets to promote and defend the use of cryptographic ledger in society.
Yearly rate	\$120	\$120	\$370	\$1,000		
Legal Services	After the fundraiser, the Foundation will pay for its own legal expenses through MME.	Retain our counsel and start exploring, as a failsafe, alternative legal structures or advocacy for the Foundation beyond the Swiss Cryptovalley.	Retain our counsel and start exploring, as a failsafe, alternative legal structures or advocacy for the Foundation beyond the Swiss Cryptovalley.	Retain our counsel and start exploring, as a failsafe, alternative legal structures or advocacy for the Foundation beyond the Swiss Cryptovalley.	Lobby municipalities and local governments to use formally verified smart contracts as a form of binding legal contract.	Fund efforts to digitize and map transaction logic from traditional legal prose to a Tezos language.
Yearly rate	\$100	\$250	\$250	\$250		
Business Development	Kathleen Breitman manages all non-technical efforts.	Hire one strong former management consultant to assist in interfacing with vendors and service providers.	Hire two seasoned former management consultants and a community manager to engage with token holders.	Hire a blend of junior & senior business development talent, as well as a business development person in China and a community manager.	Purchase a banking license and deploy the Tezos blockchain as a backbone for business operations. Experiment with automation using a blockchain for basic processes.	Negotiate with a small nation-state the recognition of Tezos as one of their official state currencies, which would immediately give Tezos favorable treatment in terms of financial regulation. Attempt negotiations to purchase or lease sovereign land.
Yearly rate	\$0	\$250	\$450	\$750		
Education		Produce a series of online Michelson tutorials with videos and exercises.	Produce in addition an OCaml MOOC geared towards increasing our potential developer base.	Also run a quaterly Tezos school focusing on protocol development in OCaml and smart contracts.	Offer student grants for conducting projects related to the Tezos ecosystem and subsidize OCaml education in universities.	Run a development school with emphasis on functional programming and safe smart contract construction.
Yearly rate	\$0	\$50	\$125	\$350		
Annual Rate	\$1,120	\$1,570	\$2,995	\$5,600	\$10,000 - 15,000	\$20,000 and above



# Contact

**contact@tezos.com**



# EXHIBIT 2

## Tezos Contribution and XTZ Allocation Terms and Explanatory Notes

### 1. Principles

1. The following Terms (“Terms”) govern the contribution procedure (“Contributions” collectively, and “Contribution” individually) to the Tezos Foundation (“TEZOS”) by contributors (“Contributors” collectively, and “Contributor” individually) and the subsequent genesis allocation of transferable cryptographic blockchain-based digital information units called tez (“XTZ”) to Contributors.
2. TEZOS promotes and develops new technologies and applications, especially in the fields of new open and decentralized software architectures. A dominating, but not exclusive focus is set on the promotion and development of the so-called Tezos protocol and the related technologies, as well as the promotion and support of applications using the Tezos protocol. TEZOS will mainly promote the development of software technology (“the Client”) that can handle different sorts of blockchain algorithms and can be used to design a blockchain, which can amend itself to perform new functionalities over time (“Tezos Network”). Operation of the Tezos Network involves transferable cryptographic blockchain-based digital information units called tez (XTZ). XTZ is a token that allows the holder to deploy and run software code, vote on network governance issues and support operation of the network through “block creation and validation”. TEZOS will have a veto power regarding all votes cast by the XTZ holders for one year following the launch of the Tezos Network.
3. When TEZOS judges that the Client has been sufficiently developed to allow the Tezos Network to be launched, TEZOS will issue a public announcement recommending what initial state (“Genesis State”) it should have. The Genesis State will include allocations of XTZ that are essential for the Tezos Network to operate. The recommended allocations of XTZ will reflect early contributions made towards the development of the network, and Contributions made to support TEZOS. However, since the Tezos Network will be operated by an independent community of participants around the world using The Client, the community has discretion to adopt or not to adopt the recommendation. Therefore, TEZOS cannot guarantee to any party that they will have an initial allocation of XTZ, because this depends upon the discretion of the community. **The Contributor understands and accepts that TEZOS cannot guarantee that Contributors shall have any allocation of XTZ when the TEZOS Network is created.**
4. The Contributor understands and accepts that while the individuals and entities, including involved entities assigned to this task, will make reasonable efforts to develop and complete the Tezos Network, **it is possible that such development may fail and that the Tezos Network and any XTZ will not be created, become useless and/or valueless due to technical, commercial, regulatory or any other reasons** (see also section 7 regarding Risks).
5. The Contributor is also aware of the risk that even if all or parts of the Tezos Network are successfully developed and released in full or in parts, due to a lack of public interest, the Tezos Network could be fully or partially abandoned, remain commercially unsuccessful, or shut down for lack of interest or other reasons. **The Contributor therefore understands and accepts that the Contribution to TEZOS, and/or the allocation, use and ownership of XTZ, carries significant financial, regulatory and/or reputational risks (including the complete loss of value (if any) of XTZ and attributed features).**

6. By contributing to TEZOS, the Contributor expressly agrees to all of the terms and conditions set forth in the "Contribution Software System" or "CSS", existing on the blockchain at the addresses published before the start of the Contribution Period at: <https://crowdfund.tezos.com>, and in this document (together the "Terms"). The Contributor further confirms to have carefully reviewed the Terms and fully understands the risks and costs of making a Contribution to TEZOS.
7. The Contributor also understands and accepts that - as the issuance of allocation proposals of XTZ is software based - the functions, terms and conditions applicable thereto are set forth in the CSS. To the extent the terms contained herein or in any other document or communication contradict the ones set forth in the CSS, the terms of the CSS prevail. Furthermore, no other document or communication may modify or add any additional obligations or covenants to TEZOS beyond those set forth in the CSS or in this document.
8. This document does not constitute a prospectus of any sort, is not a solicitation for investment and does not pertain in any way to an offering of securities in any jurisdiction. It is a description of the functionality of a software-based fundraising campaign.
9. By donating to TEZOS, and/or by receiving, using and holding XTZ, no form of partnership, joint venture or any similar relationship between the Contributors, TEZOS and/or other individuals or entities involved with the Tezos Network is created.

## **2. Representations and Warranties of Contributor**

10. The Contributor understands and accepts that XTZ do not represent or constitute any ownership right or stake, share or security or equivalent right in or relating to TEZOS, the Client, the Tezos Network and/or any software, any public or private company, corporation, entity or property.
11. By donating to TEZOS, and/or by receiving, using and holding XTZ, the Contributor represents and warrants that:
  - a. the Contributor deeply understands the functionality, usage, storage, transmission mechanisms and intricacies associated with cryptographic tokens, such as bitcoin (BTC) and ether (ETH), and blockchain-based software systems and intends to use XTZ to participate in network governance, mining activities or connecting private networks;
  - b. the Contributor is legally permitted to receive and hold and make use of XTZ in the Contributor's jurisdiction;
  - c. the Contributor is legally permitted to receive software and contribute to TEZOS;
  - d. the Contributor is of a sufficient age to legally obtain XTZ;
  - e. the Contributor will take sole responsibility for any restrictions and risks associated with receiving and holding XTZ;
  - f. the Contributor is not contributing to TEZOS to obtain XTZ for the purpose of speculative investment;

- g. the Contributor is not obtaining or using XTZ for any illegal purposes;
- h. the Contributor waives the right to participate in a class action lawsuit or a classwide arbitration against any entity or individual involved with the Contribution to TEZOS, with the allocation of XTZ and with the operation of the Tezos Network;
- i. the Contributor understands the Contribution to TEZOS and the allocation of XTZ do not involve the purchase of shares or any equivalent in any existing or future public or private company, corporation or other entity in any jurisdiction;
- j. the Contributor understands and expressly accepts that there is no warranty whatsoever on XTZ and/or the success of the Tezos Network, expressed or implied, to the extent permitted by law, and that XTZ is created and obtained at the sole risk of the Contributor on an “as is” and “under development” basis and without, to the extent permitted by law, any warranties of any kind, including, but not limited to, warranties of title or implied warranties, merchantability or fitness for a particular purpose;
- k. the Contributor understands and accepts that the Contribution Software and/or the CSS and/or underlying protocols may either delay and/or not execute a Contribution due to the overall Contribution volume, mining attacks and similar events;
- l. the Contributor understands with regard to XTZ no market liquidity may be guaranteed and that the value of XTZ over time (if any) may experience extreme volatility or depreciate in full;
- m. the Contributor understands that the Contributor bears the sole responsibility for determining if the Contribution to TEZOS, the allocation, use or ownership of XTZ, the potential appreciation or depreciation in the value of XTZ over time (if any), the sale and purchase of XTZ and/or any other action or transaction related to the Tezos Network have tax implications; by contributing to TEZOS, and/or by receiving, using or holding XTZ, and to the extent permitted by law, the Contributor agrees not to hold any associated party (including developers, auditors, contractors or founders) liable for any tax liability associated with or arising from the Contribution to TEZOS, the allocation, use or ownership of XTZ or any other action or transaction related to the Tezos Network;
- n. the Contributor accepts any and all risks, costs and damages associated with Contributions from any US persons or US entities related in any way to the Contributor.

### **3. TEZOS Contribution Procedure**

#### **3.1. Qualification**

12. Any contribution made to TEZOS during the Contribution Period as described below is qualified as a non-refundable donation, except a respective portion of a non-refundable

administration support fee of USD 150,000 in total, calculated using the exchange rates as reported by <http://www.coindesk.com/price/> at the end of the Contribution Period.

### **3.2. Contribution Period**

13. The contribution period starts on Saturday, July 1, 2017 at 6 am UTC and will last for 2000 bitcoin blocks, which should correspond approximately to 14 days ("Contribution Period").
14. Contributions can be made using ether (ETH) or bitcoin (BTC).
15. The minimal Contribution amount per User will be 0.1 BTC. If a User makes a contribution of less than 0.1 BTC, this will still be counted as a Contribution and no refund is possible. However, any recommendation for XTZ allocation (as set forth below, see section 4) in such a case, is fully at the discretion of the Foundation, and cannot be expected. The ETH amounts will be calculated according to the mechanism as defined in paragraph 25.
16. There is no cap regarding possible Contributions.

### **3.3. Contribution Software and Contribution Procedure**

17. Contributions in ETH or BTC must be made by using the contribution software ("Contribution Software") provided by TEZOS. The Contribution Software creates a key pair for every Contributor ("Key Pair"), consisting of the private key (encrypted with a password provided by the Contributor) and a public key. The Contributor will have to download and store a copy of the Key Pair.
18. Within the Contribution Software, the Contributor may choose, whether he wants to contribute in ETH or in BTC. Generally, a Contribution in BTC is recommended. Any ETH or BTC Contribution to TEZOS without using the Contribution Software will not lead to a recommendation for XTZ allocation as set forth below (see section 4). TEZOS is aware that Users may be able to participate via exchangers and other intermediaries. The use of such exchangers or intermediaries is solely at the Users' own risk and TEZOS accepts no responsibility for their use.
19. If Contributor contributes BTC, the Contribution Software will derive a unique BTC address associated with the User's newly generated public key ("BTC Contribution Address"). This will be a P2SH multisignature address, which starts with an OP\_Pushdata operation containing the hash of the public key of the Contributor. Contributions to BTC Contribution Addresses must be linked to this hash, otherwise no recommendation for an allocation to the Contributor may be made. The amount of BTC, the date of the Contribution and the public key of the Contributor will be recorded on the Bitcoin blockchain and later extracted by the CSS and used for the recommendation of allocation of XTZ.
20. If Contributor contributes ETH, he sends the Contribution to an Ethereum contract that is a part of the CSS ("Contribution ETH Contract"). The Contributor sends a hash of his Tezos public key generated by the CSS. The value of ETH Contributions will be recorded according to paragraph 25. The information regarding the Contributions to the Contribution ETH Contract, specifically source, amount, value and the hash of the public key will be extracted by the CSS and used for the recommendation of allocation of XTZ. The Contributor has to ensure, not to send the wrong hash of the Tezos public key. Failure to

do so may have the result, that Contributor will not get a recommendation of XTZ allocation.

21. Contributor will have the possibility to check via a link at <https://crowdfund.tezos.com>, if all information has been transferred properly.
22. During the Contribution Period, the Tezos team may, for security reasons, pause the contribution function until the security issues have been resolved.

### **3.4. Recorded Information**

23. Contributions made to TEZOS during the Contribution Period will be recorded on the BTC blockchain (BTC Contributions) or on the ETH blockchain (ETH Contributions) as contribution information ("Contribution Information").
24. Upon a successful Contribution having been made, the Contribution Information will be recorded, reflecting the quantity of XTZ that TEZOS shall propose to allocate to the Contributor in proportion to his Contribution. Such allocation shall be proposed in accordance with the mechanism set forth below (see section 4).
25. The CSS will record the equivalent value of Contributions in BTC. The BTC equivalent for ETH shall be calculated using the historical exchange rate of BTC/ETH at approximately the time of the ETH Contribution, calculated by TEZOS based on data provided by Poloniex, Kraken and Gdax, or three other major exchanges chosen at the discretion of TEZOS (if required because of technical difficulties). These calculations will be made on a best effort basis by TEZOS.

### **3.5. Bonus System**

26. When Contributions are recorded by the CSS, a bonus system is applied for the purpose of XTZ allocation ("Contribution Bonus"). The basis of the bonus system is the conversion of the Contribution Period into bitcoin blocks ("Blocks"). The Contribution Bonus will be granted for Contributors, who contribute early in the Contribution Period and decreases from 20% to 0% over a period of (2000) Blocks as follows:
  - a. Blocks 0 to 399 (inclusive): Contribution Bonus of 20%;
  - b. Blocks 400 to 799 (inclusive): Contribution Bonus of 15%;
  - c. Blocks 800 to 1199 (inclusive): Contribution Bonus of 10%;
  - d. Blocks 1200 to 1599 (inclusive): Contribution Bonus of 5%;
  - e. Blocks 1599 to 1999 (inclusive): Contribution Bonus of 0%;

## **4. XTZ Allocation Proposal**

27. When TEZOS judges in its sole discretion both that the Client is sufficiently developed to launch the TEZOS Network and that it is an appropriate time to launch the Tezos Network, it will issue a public announcement recommending what the Genesis State should be. It shall recommend the allocations of XTZ in the Genesis State as set forth below.

28. For every Contribution of BTC and/or ETH, as recorded by the Contribution Information, TEZOS will recommend the allocation of XTZ in the Genesis Block as follows:

One XTZ shall be allocated for the amount (or equivalent according to paragraph 25) of 0.0002 BTC. Additionally, there shall be allocated the number of XTZ, according to the Contribution Bonus system (see paragraph 26), if such a Contribution Bonus applies.

29. It remains in the community's discretion to adopt or not to adopt the Genesis State that TEZOS recommends. TEZOS cannot guarantee to Contributors that they shall have any allocation and/or creation of XTZ as set forth in these terms.
30. TEZOS shall recommend the allocations of XTZ in the Genesis State according to the principles set forth below and under section 3.5 above:

- **Pool A:** Consists of an open amount of XTZ that shall be allocated to Contributors who made Contributions to TEZOS during the Contribution Period.

For Pool A, TEZOS will recommend XTZ to be created in the Genesis State and allocated to the Contributors according to their respective Contributions as recorded in the Contribution Information and reflecting the individual Contribution Bonus granted according to paragraph 26.

- **Pool B:** Consists of the amount of XTZ equivalent to USD 893'200.77, plus a Contribution Bonus of 20% at the start of the Contribution Period. The exchange rate of BTC/USD will be calculated based on the closing rate on the last day before the start of the Contribution Period, as reported by <http://www.coindesk.com/price/>. The Genesis State shall allocate Pool B to early backers, who have contributed in advance of the Contribution Period ("Early Backers").

For Pool B, TEZOS will recommend the individual amounts of XTZ, which shall be created and allocated to Early Backers in proportion to their Contributions.

- **Pool C:** Consists of the amount of XTZ equivalent to USD 422'000.00, plus a Contribution Bonus of 20% at the start of the Contribution Period. The exchange rate of BTC/USD will be calculated based on the closing rate on the last day before the start of the Contribution Period, as reported by <http://www.coindesk.com/price/>. The Genesis State shall allocate Pool C to Advisors, Management, Founders and other persons who have supported the Tezos Project in an early stage.

- **Pool D:** 1/8 of the amount of XTZ of Pool A, B and C combined (approx. 10% of the total amount of XTZ) shall be allocated by the Genesis State to TEZOS itself. These XTZ will be used at the complete discretion of TEZOS for the development and maintenance of the Tezos Project and/or the Tezos Network. The XTZ of Pool D shall vest over a period of 4 years.

- **Pool E:** 1/8 of the amount of XTZ of Pool A, B and C combined (approx. 10% of the total amount of XTZ) shall be allocated by the Genesis State to TEZOS and shall be used to finance the purchase of the shares of Dynamic Ledger Solutions Inc. by TEZOS. If this purchase effectively takes place, the XTZ of Pool E will be transferred to the sellers of Dynamic Ledger Solutions over a duration of 4 years. Any XTZ of Pool E, which have not been used for the purchase of the shares of Dynamic Ledger Solutions



Inc., may be used by TEZOS at its own discretion to further develop and maintain the Tezos Network and the Tezos Project.

31. Contributors will have to download encrypted wallets ("XTZ Wallet"), which will be necessary to claim XTZ as soon as the Tezos Network has been launched. Technically, the Contributor will have to import his XTZ Wallet into the Tezos Client after the Launch of the Tezos Network, in order to claim his XTZ. The XTZ will then be allocated to this wallet address. Contributor hereby agrees and accepts, that he will not gain access to his XTZ, if he does not download the respective XTZ Wallet, or loses the password and/or private key or fails to secure the XTZ Wallet against unauthorized access. In any such case, neither TEZOS, nor any other of the involved persons will be able to restore the information and the XTZ will be irretrievably lost.
32. The Contributor understands and accepts, that the Tezos Network will create new XTZ as a reward for "block creation and validation". These rewards will create nominal inflation of XTZ and may therefore lead to a dilution of the overall amount of XTZ.

## **5. TEZOS Project Execution**

33. It remains at TEZOS' sole discretion to decide how to use the received Contributions to develop and execute the Tezos Project. A part of the Contributions will be used to purchase all shares of Dynamic Ledger Solutions, Inc. This part (which is independent from Pool E) maximally amounts to 8.5% of the Contributions made. If this part has not been used (partially or entirely) for the purchase of the shares of Dynamic Ledger Solutions Inc., it may be used by TEZOS at its own discretion to further develop and maintain the Tezos Network and the Tezos Project.
34. The Contributor understands and accepts that he does not have any influence over the governance of TEZOS.
35. TEZOS has the right to engage subcontractors to perform some or all of the development and execution of the Tezos Project.
36. The Contributor understands and accepts that the Tezos Network is undergoing substantial development which may involve significant conceptual, technical and commercial changes before release.

## **6. Audit of the Contribution Software and the CSS**

37. The Contribution Software and the CSS have been, on a reasonable effort basis, audited and approved by technical experts with regard to their functionality. The technical experts have further confirmed that the Contribution Software and the CSS have, with regard to both accuracy and security, been programmed according to the current state of the art.
38. However, the Contributor understands and accepts that the used software and technology is still in an early development stage and its application is of an experimental nature which carries significant operational, technological, financial, regulatory and reputational risks. Accordingly, while the conducted audit raises the level of security and accuracy, the Contributor understands and accepts that the audit does not amount to any form of warranty, including direct or indirect warranties that the Contribution Software and the CSS are fit

for a particular purpose or do not contain any weaknesses, vulnerabilities or bugs which could cause, inter alia, the complete loss of BTC, ETH and/or XTZ.

## 7. Risks

39. The Contributor understands and accepts the risks in connection with the Contribution to TEZOS, and/or with the allocation, use and ownership of XTZ. In particular, but without being limited to these examples, the Contributor understands the inherent risks set forth above and hereinafter:

- **Risk of software weaknesses:** The Contributor understands and accepts that the underlying software application and software platform, the Tezos Network, the Client, the Contribution Software, the CSS and other involved software and technology and technical concepts and theories are still in an early development stage and unproven, that there is no warranty that the process for receipt, use and ownership of XTZ will be uninterrupted or error-free and that there is an inherent risk that the software and related technologies and theories could contain weaknesses, vulnerabilities or bugs causing, inter alia, the complete loss of XTZ.
- **Regulatory risk:** The Contributor understands and accepts that blockchain technologies allow new forms of interaction and that it is possible that certain jurisdictions will apply existing regulations on, or introduce new regulations addressing, blockchain technology-based applications, which may be contrary to the current setup of the CSS and which may, inter alia, result in substantial modifications of the Tezos Network, including its termination and the loss of XTZ for the Contributor. Further, the Contributor accepts and bears the risks with respect to US regulations that may regulate Contribution and/or potential custody of XTZ.
- **Risk of abandonment / lack of success:** The Contributor understands and accepts that the allocation of XTZ and the development of the Tezos Network may be abandoned for a number of reasons, including lack of interest from industry and/or the public, lack of funding, lack of commercial success or prospects (e.g. caused by competing projects). The Contributor therefore understands that there is no assurance that, even if the Tezos Network is partially or fully developed and launched, the Contributor will receive any functionality through the XTZ held by him.
- **Risk associated with other applications:** The Contributor understands and accepts that the Tezos Network may give rise to other, alternative projects, promoted by unaffiliated third parties, under which XTZ will have no intrinsic value.
- **Risk of loss of private key:** XTZ may only be accessed using a private key that corresponds to the address at which it is stored. The Contributor understands and accepts that if his private key, or the “seed” used to create his address and corresponding private key is lost or stolen, the obtained XTZ associated with the Contributor’s address will be unrecoverable and will be permanently lost.
- **Risk of theft:** The Contributor understands and accepts that the underlying software application and software platform, the Tezos Network, the Client, the Contribution Software, the CSS, other involved software, other technology components and/or platforms may be exposed to attacks by hackers or other individuals that could result in theft or

loss of XTZ, or the theft or loss of Contributions, impacting the ability to develop and launch the Tezos Network.

- **Risk of blockchain mining attacks:** The Contributor understands and accepts that, as with other public blockchain-based systems that depend on independent miners, the Tezos Network may be susceptible to mining attacks including but not limited to double-spend attacks, majority mining power attacks, “selfish-mining” attacks, and race condition attacks. Any successful attacks present a risk to the Tezos Network, expected proper execution and sequencing of XTZ transactions, and expected proper execution and sequencing of software computations.
- **Risk of governance attacks and failure:** The Contributor understands and accepts that the Tezos Network uses an in-built decentralized governance system (“Governance System”). It is possible that the Governance System adopts proposals that have an adverse effect on the useful functioning of the Tezos Network and/or the value of XTZ. If the Governance System is attacked, or becomes controlled either directly or indirectly by some party or parties that make unwise decisions, or the community generally makes unwise decisions, the value of XTZ held by a Contributor might be greatly reduced or even permanently lost.

## 8. Taxation

40. The Contributor bears the sole responsibility for determining if his Contribution to TEZOS, the allocation, use or ownership of XTZ, the potential appreciation or depreciation in the value of XTZ over time (if any), the sale and purchase of XTZ and/or any other action or transaction related to the Tezos Network have tax implications for him.
41. By donating to TEZOS, and/or by receiving, using or holding XTZ, and to the extent permitted by law, the Contributor agrees not to hold any third party (including developers, auditors, contractors or founders) liable for any tax liability associated with or arising from the Contribution to TEZOS, the allocation, use or ownership of XTZ or any other action or transaction related to the Tezos Network.

## 9. No Liability

42. The Contributor acknowledges and agrees that, to the fullest extent permitted by any applicable law, the Contributor will not hold TEZOS, any developers, auditors, contractors or founders and/or the Tezos Network liable for any and all damages or injury whatsoever caused by or related to the use of, or the inability to use, the Contribution Software, the CSS, the XTZ or the Tezos Network under any cause or action whatsoever of any kind in any jurisdiction, including, without limitation, actions for breach of warranty, breach of contract or tort (including negligence) and that developers, auditors, contractors or founders of the Contribution Software, the CSS, the XTZ or the Tezos Network shall not be liable for any indirect, incidental, special, exemplary or consequential damages, including for loss of profits, goodwill or data, in any way whatsoever arising out of the use of, or the inability to use of the Contribution Software, the CSS, the XTZ or the Tezos Network.
43. The Contributor further specifically acknowledges that TEZOS and developers, auditors, contractors or founders of the Contribution Software, the CSS, the XTZ or the Tezos Network are not liable, and the Contributor agrees not to seek to hold them liable, for the

conduct of third parties, including other creators of XTZ, and that the risk of creating, holding and using XTZ rests entirely with the Contributor.

44. By receiving, holding or using XTZ, and to the extent permitted by law, the Contributor agrees not to hold any third party (including, without limitation, TEZOS, developers, auditors, contractors or founders) liable for any regulatory implications or liability associated with or arising from the allocation, ownership or use of XTZ or any other action or transaction related to the Tezos Network.

#### **10. Miscellaneous**

45. The Contributor agrees that if any portion of these Terms is found illegal or unenforceable, in whole or in part, such provision shall, as to such jurisdiction, be ineffective solely to the extent of such determination of invalidity or unenforceability without affecting the validity or enforceability thereof in any other manner or jurisdiction and without affecting the remaining provisions of the Terms, which shall continue to be in full force and effect.
46. The Contribution Software and the Client are located in Alderney. Consequently, the contribution procedure, the XTZ creation and XTZ allocation is considered to be executed in Alderney.
47. The Terms govern the Contributions to TEZOS, and the allocation, use and holding of XTZ and supersede any public statements about the launch of Tezos Network and/or the XTZ made by anyone in the past, present and future.
48. The applicable law is Swiss law. Any dispute arising out of or in connection with the creation of the XTZ and the development and execution of the Tezos Network shall be exclusively and finally settled by the ordinary courts of Zug, Switzerland.

# EXHIBIT 3



[contribution](#) [terms](#) [fundraiser](#) [faq](#) [tezos](#) [main site](#)

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# Fundraiser FAQ

## Background information

Here is an [overview document](#) presenting the project and the fundraiser

## When is the Tezos fundraiser?

The fundraiser for the Tezos Foundation will begin on July 1st, 2017 at 6am UTC. It will last about two weeks (depending upon how long it takes for the Bitcoin network to mine 2000 blocks), and will result in a recommended allocation of tezzies (XTZ) to participants.

## How do I access the fundraiser?

You can access the fundraiser at <https://crowdfund.tezos.com> which will go live when the fundraiser opens. It will offer step-by-step instructions.

To give you an idea, here's a walkthrough of the contribution process:

**If** you intend to use altcoins through Shapeshift, here are special instructions

## Is the fundraiser capped?

Following the example set by the Ethereum Foundation, there is no limit on the amount of contributions that will be accepted. Capped fundraisers are typically dominated by a few large users with fast fingers. Tezos seeks to be accessible to everyone wishing to join in creating a robust and vibrant Tezos network.

## What is the minimum contribution?

The minimum contribution is 0.1 BTC or its equivalent in other means.

## What other means of contribution will be accepted besides BTC (XBT)?

The Tezos Foundation will also accept ETH, and offers a convenient way to contribute other alts via ShapeShift. If you choose to contribute in ETH, the equivalent BTC amount will be estimated based upon the timestamp of the Ethereum block in which the transaction is included, and the median of the the last trade price on Poloniex, Kraken, and GDAX. This is offered for the convenience of ETH holders and on a best-effort basis. If you want certainty contribute with BTC, otherwise you accept the risk that the exchange rate you'll get may not be exactly what you see on the screen at the moment of your contribution. Contributions in fiat currencies are also possible through Bitcoin Suisse AG, though be advised to check their rates and their legal agreement, and start the account opening process as soon as you can in order to give them sufficient time to process your application and for you to wire the money to their bank account before the fundraiser starts.

## Can I send from an exchange?

Yes, but if contributing with ETH you need to be able to send data alongside the transaction, so make sure your exchange or wallet can do so.

## Are there bonus periods?

The fundraiser will last for a period of 2000 Bitcoin blocks. Throughout this period, a contribution of one bitcoin will lead to a recommended allocation of five-thousand tezzies (5,000 XTZ) plus a time-dependent bonus. The bonus starts at 20%, meaning that a contribution of 1 BTC will yield a recommended allocation of 6,000 XTZ (a 1000 XTZ bonus). From 20% at the outset the bonuses will decrease progressively to 0% over four additional periods (15%, 10%, 5%, and 0%) lasting 400 Bitcoin blocks each. The average time between Bitcoin blocks is approximately 10 minutes, thus the fundraiser is expected to last about two weeks, and each bonus period of 400 blocks roughly two days and eighteen hours.



# How exactly do I contribute to the fundraiser?

1. Visit <https://crowdfund.tezos.com> after the fundraiser begins on July 1st, 2017 at 6am UTC. Make sure you type this exact address. Do not follow a link in an email or online; manually type this address into your browser. You will then go through the following steps:
2. First your browser will be checked for compatibility. Once verified, you may either continue the process online or download a static html document which you can use on an air-gapped (not connected to the Internet) computer. If you are considering making a large contribution, we strongly advise you to use the *offline* option and to use a brand new computer for the occasion which should be securely wiped after use.
3. You will be presented with a prompt asking for an email address and a new password. This isn't a registration. The email and password act as a secondary safety factor to protect the wallet that will be generated on the next screen. Pick a strong but memorable password. Losing your password means you will not be able to access the XTZ which may be allocated to you. There is no way to recover your password if you forget it. Click 'next'.
4. Your browser will generate a set of words (a "mnemonic") representing your private key, as well as the hash of your public key. You must keep these words secure. The hash of your public key a string of numbers and letters starting with "tz1". You can use it to verify your contribution after you have completed the process.
5. Save your wallet, either by manually copying the mnemonic, printing it, or moving the file to a USB drive. Verify that the seed words and public hash on the webpage match your downloaded wallet. Click 'next'.
6. Refer to the wallet number at the top of the document you just saved. Type your wallet number into the appropriate prompt and re-enter your password. Click 'next'. If you used the offline option, you will instead have to follow a link online to continue the contribution process. You can use your regular computer for that step, as it does not leak the private key. If using the online option you will directly go to the contribution screen.
7. You may now enter your desired contribution (if using BTC it is labeled XBT). You can send a test first, and/or send from multiple wallets/exchanges over several transactions. Remember if sending with ETH you must send it with the data as indicated in your paper wallet. Initiate the transfer by clicking your chosen contribution method (if it is fiat currency you will be directed to BitcoinSuisse AG's website and you may skip the rest of step #8). Whether contributing in Bitcoin or Ethereum, double-check that the address is correctly entered by comparing it with your paper wallet, and complete the transfer. If using ShapeShift, click the ShapeShift button and enter the type of alt you'd like to convert into XBT. The destination address automatically populates, though you should check it by clicking on Bitcoin on the conversion page. Enter a return address (an address where your alts can be send back) in case the transaction does not go through, and enter your email address for a receipt of the transaction. Submit after double-checking everything and you are ready.
8. Once the transaction is confirmed (which will take 6 bitcoin blocks, regardless of your contribution method), you will be able to confirm receipt of your

**Ex. 3 - Pg. 39**



contribution by following the "receipts" link and entering the public hash listed in your wallet.

9. You're done!

## When will Tezos first be listed on an exchange?

A few exchanges have expressed interest but there is no exact timeline for XTZ to become listed. XTZ will most likely begin listing when the Tezos network becomes active and changes in ownership can be recorded on the blockchain. The development team estimates that the time to completion is around 4 months, however, bear in mind this could take longer due to unforeseen events common in software development. The Tezos Foundation will not be able to allocate tokens until the network launches. If you are anxious about exchange listing dates, we suggest you do not contribute to the fundraiser and wait until such a listing happens.

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# EXHIBIT 4

## **SECURITIES AND EXCHANGE COMMISSION**

### **SECURITIES EXCHANGE ACT OF 1934**

**Release No. 81207 / July 25, 2017**

#### **Report of Investigation Pursuant to Section 21(a) of the Securities Exchange Act of 1934: The DAO**

##### **I. Introduction and Summary**

The United States Securities and Exchange Commission's ("Commission") Division of Enforcement ("Division") has investigated whether The DAO, an unincorporated organization; Slock.it UG ("Slock.it"), a German corporation; Slock.it's co-founders; and intermediaries may have violated the federal securities laws. The Commission has determined not to pursue an enforcement action in this matter based on the conduct and activities known to the Commission at this time.

As described more fully below, The DAO is one example of a Decentralized Autonomous Organization, which is a term used to describe a "virtual" organization embodied in computer code and executed on a distributed ledger or blockchain. The DAO was created by Slock.it and Slock.it's co-founders, with the objective of operating as a for-profit entity that would create and hold a corpus of assets through the sale of DAO Tokens to investors, which assets would then be used to fund "projects." The holders of DAO Tokens stood to share in the anticipated earnings from these projects as a return on their investment in DAO Tokens. In addition, DAO Token holders could monetize their investments in DAO Tokens by re-selling DAO Tokens on a number of web-based platforms ("Platforms") that supported secondary trading in the DAO Tokens.

After DAO Tokens were sold, but before The DAO was able to commence funding projects, an attacker used a flaw in The DAO's code to steal approximately one-third of The DAO's assets. Slock.it's co-founders and others responded by creating a work-around whereby DAO Token holders could opt to have their investment returned to them, as described in more detail below.

The investigation raised questions regarding the application of the U.S. federal securities laws to the offer and sale of DAO Tokens, including the threshold question whether DAO Tokens are securities. Based on the investigation, and under the facts presented, the Commission has determined that DAO Tokens are securities under the Securities Act of 1933 ("Securities Act") and the Securities Exchange Act of 1934 ("Exchange Act").<sup>1</sup> The Commission deems it appropriate and in the public interest to issue this report of investigation ("Report") pursuant to

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<sup>1</sup> This Report does not analyze the question whether The DAO was an "investment company," as defined under Section 3(a) of the Investment Company Act of 1940 ("Investment Company Act"), in part, because The DAO never commenced its business operations funding projects. Those who would use virtual organizations should consider their obligations under the Investment Company Act.

Section 21(a) of the Exchange Act<sup>2</sup> to advise those who would use a Decentralized Autonomous Organization (“DAO Entity”), or other distributed ledger or blockchain-enabled means for capital raising, to take appropriate steps to ensure compliance with the U.S. federal securities laws. All securities offered and sold in the United States must be registered with the Commission or must qualify for an exemption from the registration requirements. In addition, any entity or person engaging in the activities of an exchange must register as a national securities exchange or operate pursuant to an exemption from such registration.

This Report reiterates these fundamental principles of the U.S. federal securities laws and describes their applicability to a new paradigm—virtual organizations or capital raising entities that use distributed ledger or blockchain technology to facilitate capital raising and/or investment and the related offer and sale of securities. The automation of certain functions through this technology, “smart contracts,”<sup>3</sup> or computer code, does not remove conduct from the purview of the U.S. federal securities laws.<sup>4</sup> This Report also serves to stress the obligation to comply with the registration provisions of the federal securities laws with respect to products and platforms involving emerging technologies and new investor interfaces.

## II. Facts

### A. Background

From April 30, 2016 through May 28, 2016, The DAO offered and sold approximately 1.15 billion DAO Tokens in exchange for a total of approximately 12 million Ether (“ETH”), a

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<sup>2</sup> Section 21(a) of the Exchange Act authorizes the Commission to investigate violations of the federal securities laws and, in its discretion, to “publish information concerning any such violations.” This Report does not constitute an adjudication of any fact or issue addressed herein, nor does it make any findings of violations by any individual or entity. The facts discussed in Section II, *infra*, are matters of public record or based on documentary records. We are publishing this Report on the Commission’s website to ensure that all market participants have concurrent and equal access to the information contained herein.

<sup>3</sup> Computer scientist Nick Szabo described a “smart contract” as:

a computerized transaction protocol that executes terms of a contract. The general objectives of smart contract design are to satisfy common contractual conditions (such as payment terms, liens, confidentiality, and even enforcement), minimize exceptions both malicious and accidental, and minimize the need for trusted intermediaries. Related economic goals include lowering fraud loss, arbitrations and enforcement costs, and other transaction costs.

See Nick Szabo, *Smart Contracts*, 1994, <http://www.virtualschool.edu/mon/Economics/SmartContracts.html>.

<sup>4</sup> See *SEC v. C.M. Joiner Leasing Corp.*, 320 U.S. 344, 351 (1943) (“[T]he reach of the [Securities] Act does not stop with the obvious and commonplace. Novel, uncommon, or irregular devices, whatever they appear to be, are also reached if it be proved as matter of fact that they were widely offered or dealt in under terms or courses of dealing which established their character in commerce as ‘investment contracts,’ or as ‘any interest or instrument commonly known as a ‘security’.”); see also *Reves v. Ernst & Young*, 494 U.S. 56, 61 (1990) (“Congress’ purpose in enacting the securities laws was to regulate investments, in whatever form they are made and by whatever name they are called.”).

virtual currency<sup>5</sup> used on the Ethereum Blockchain.<sup>6</sup> As of the time the offering closed, the total ETH raised by The DAO was valued in U.S. Dollars (“USD”) at approximately \$150 million.

The concept of a DAO Entity is memorialized in a document (the “White Paper”), authored by Christoph Jentzsch, the Chief Technology Officer of Slock.it, a “Blockchain and IoT [(internet-of-things)] solution company,” incorporated in Germany and co-founded by Christoph Jentzsch, Simon Jentzsch (Christoph Jentzsch’s brother), and Stephan Tual (“Tual”).<sup>7</sup> The White Paper purports to describe “the first implementation of a [DAO Entity] code to automate organizational governance and decision making.”<sup>8</sup> The White Paper posits that a DAO Entity “can be used by individuals working together collaboratively outside of a traditional corporate form. It can also be used by a registered corporate entity to automate formal governance rules contained in corporate bylaws or imposed by law.” The White Paper proposes an entity—a DAO Entity—that would use smart contracts to attempt to solve governance issues it described as inherent in traditional corporations.<sup>9</sup> As described, a DAO Entity purportedly would supplant traditional mechanisms of corporate governance and management with a blockchain such that contractual terms are “formalized, automated and enforced using software.”<sup>10</sup>

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<sup>5</sup> The Financial Action Task Force defines “virtual currency” as:

a digital representation of value that can be digitally traded and functions as: (1) a medium of exchange; and/or (2) a unit of account; and/or (3) a store of value, but does not have legal tender status (i.e., when tendered to a creditor, is a valid and legal offer of payment) in any jurisdiction. It is not issued or guaranteed by any jurisdiction, and fulfils the above functions only by agreement within the community of users of the virtual currency. Virtual currency is distinguished from fiat currency (a.k.a. “real currency,” “real money,” or “national currency”), which is the coin and paper money of a country that is designated as its legal tender; circulates; and is customarily used and accepted as a medium of exchange in the issuing country. It is distinct from e-money, which is a digital representation of fiat currency used to electronically transfer value denominated in fiat currency.

*FATF Report, Virtual Currencies, Key Definitions and Potential AML/CFT Risks*, FINANCIAL ACTION TASK FORCE (June 2014), <http://www.fatf-gafi.org/media/fatf/documents/reports/Virtual-currency-key-definitions-and-potential-aml-cft-risks.pdf>.

<sup>6</sup> Ethereum, developed by the Ethereum Foundation, a Swiss nonprofit organization, is a decentralized platform that runs smart contracts on a blockchain known as the Ethereum Blockchain.

<sup>7</sup> Christoph Jentzsch released the final draft of the White Paper on or around March 23, 2016. He introduced his concept of a DAO Entity as early as November 2015 at an Ethereum Developer Conference in London, as a medium to raise funds for Slock.it, a German start-up he co-founded in September 2015. Slock.it purports to create technology that embeds smart contracts that run on the Ethereum Blockchain into real-world devices and, as a result, for example, permits anyone to rent, sell or share physical objects in a decentralized way. *See* SLOCK.IT, <https://slock.it/>.

<sup>8</sup> Christoph Jentzsch, *Decentralized Autonomous Organization to Automate Governance Final Draft – Under Review*, <https://download.slock.it/public/DAO/WhitePaper.pdf>.

<sup>9</sup> *Id.*

<sup>10</sup> *Id.* The White Paper contained the following statement:

A word of caution, at the outset: the legal status of [DAO Entities] remains the subject of active and vigorous debate and discussion. Not everyone shares the same definition. Some have said that [DAO Entities] are autonomous code and can operate independently of legal systems; others

## B. The DAO

“The DAO” is the “first generation” implementation of the White Paper concept of a DAO Entity, and it began as an effort to create a “crowdfunding contract” to raise “funds to grow [a] company in the crypto space.”<sup>11</sup> In November 2015, at an Ethereum Developer Conference in London, Christoph Jentzsch described his proposal for The DAO as a “for-profit DAO [Entity],” where participants would send ETH (a virtual currency) to The DAO to purchase DAO Tokens, which would permit the participant to vote and entitle the participant to “rewards.”<sup>12</sup> Christoph Jentzsch likened this to “buying shares in a company and getting ... dividends.”<sup>13</sup> The DAO was to be “decentralized” in that it would allow for voting by investors holding DAO Tokens.<sup>14</sup> All funds raised were to be held at an Ethereum Blockchain “address” associated with The DAO and DAO Token holders were to vote on contract proposals, including proposals to The DAO to fund projects and distribute The DAO’s anticipated earnings from the projects it funded.<sup>15</sup> The DAO was intended to be “autonomous” in that project proposals were in the form of smart contracts that exist on the Ethereum Blockchain and the votes were administered by the code of The DAO.<sup>16</sup>

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have said that [DAO Entities] must be owned or operate[d] by humans or human created entities. There will be many use cases, and the DAO [Entity] code will develop over time. Ultimately, how a DAO [Entity] functions and its legal status will depend on many factors, including how DAO [Entity] code is used, where it is used, and who uses it. This paper does not speculate about the legal status of [DAO Entities] worldwide. This paper is not intended to offer legal advice or conclusions. Anyone who uses DAO [Entity] code will do so at their own risk.

*Id.*

<sup>11</sup> Christoph Jentzsch, *The History of the DAO and Lessons Learned*, SLOCK.IT BLOG (Aug. 24, 2016), <https://blog.slock.it/the-history-of-the-dao-and-lessons-learned-d06740f8cfa5#.5o62zo8uv>. Although The DAO has been described as a “crowdfunding contract,” The DAO would not have met the requirements of Regulation Crowdfunding, adopted under Title III of the Jumpstart Our Business Startups (JOBS) Act of 2012 (providing an exemption from registration for certain crowdfunding), because, among other things, it was not a broker-dealer or a funding portal registered with the SEC and the Financial Industry Regulatory Authority (“FINRA”). See *Regulation Crowdfunding: A Small Entity Compliance Guide for Issuers*, SEC (Apr. 5, 2017), <https://www.sec.gov/info/smallbus/secg/rccomplianceguide-051316.htm>; *Updated Investor Bulletin: Crowdfunding for Investors*, SEC (May 10, 2017), [https://www.sec.gov/oiea/investor-alerts-bulletins/ib\\_crowdfunding- html](https://www.sec.gov/oiea/investor-alerts-bulletins/ib_crowdfunding- html).

<sup>12</sup> See Slockit, *Slock.it DAO demo at Devcon1: IoT + Blockchain*, YOUTUBE (Nov. 13, 2015), <https://www.youtube.com/watch?v=49wHQoJxYPo>.

<sup>13</sup> *Id.*

<sup>14</sup> See Jentzsch, *supra* note 8.

<sup>15</sup> *Id.* In theory, there was no limitation on the type of project that could be proposed. For example, proposed “projects” could include, among other things, projects that would culminate in the creation of products or services that DAO Token holders could use or charge others for using.

<sup>16</sup> *Id.*

On or about April 29, 2016, Slock.it deployed The DAO code on the Ethereum Blockchain, as a set of pre-programmed instructions.<sup>17</sup> This code was to govern how The DAO was to operate.

To promote The DAO, Slock.it's co-founders launched a website ("The DAO Website"). The DAO Website included a description of The DAO's intended purpose: "To blaze a new path in business for the betterment of its members, existing simultaneously nowhere and everywhere and operating solely with the steadfast iron will of unstoppable code."<sup>18</sup> The DAO Website also described how The DAO operated, and included a link through which DAO Tokens could be purchased. The DAO Website also included a link to the White Paper, which provided detailed information about a DAO Entity's structure and its source code and, together with The DAO Website, served as the primary source of promotional materials for The DAO. On The DAO Website and elsewhere, Slock.it represented that The DAO's source code had been reviewed by "one of the world's leading security audit companies" and "no stone was left unturned during those five whole days of security analysis."<sup>19</sup>

Slock.it's co-founders also promoted The DAO by soliciting media attention and by posting almost daily updates on The DAO's status on The DAO and Slock.it websites and numerous online forums relating to blockchain technology. Slock.it's co-founders used these posts to communicate to the public information about how to participate in The DAO, including: how to create and acquire DAO Tokens; the framework for submitting proposals for projects; and how to vote on proposals. Slock.it also created an online forum on The DAO Website, as well as administered "The DAO Slack" channel, an online messaging platform in which over 5,000 invited "team members" could discuss and exchange ideas about The DAO in real time.

### 1. *DAO Tokens*

In exchange for ETH, The DAO created DAO Tokens (proportional to the amount of ETH paid) that were then assigned to the Ethereum Blockchain address of the person or entity remitting the ETH. A DAO Token granted the DAO Token holder certain voting and ownership rights. According to promotional materials, The DAO would earn profits by funding projects

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<sup>17</sup> According to the White Paper, a DAO Entity is "activated by deployment on the Ethereum [B]lockchain. Once deployed, a [DAO Entity's] code requires 'ether' [ETH] to engage in transactions on Ethereum. Ether is the digital fuel that powers the Ethereum Network." The only way to update or alter The DAO's code is to submit a new proposal for voting and achieve a majority consensus on that proposal. *See Jentzsch, supra* note 8. According to Slock.it's website, Slock.it gave The DAO code to the Ethereum community, noting that:

The DAO framework is [a] side project of Slock.it UG and a gift to the Ethereum community. It consisted of a definitive whitepaper, smart contract code audited by one of the best security companies in the world and soon, a complete frontend interface. All free and open source for anyone to re-use, it is our way to say 'thank you' to the community.

SLOCK.IT, <https://slock.it>. The DAO code is publicly-available on GitHub, a host of source code. *See The Standard DAO Framework, Inc., Whitepaper*, GITHUB, <https://github.com/slockit/DAO>.

<sup>18</sup> The DAO Website was available at <https://daohub.org>.

<sup>19</sup> Stephen Tual, *Deja Vu DAO Smart Contracts Audit Results*, SLOCK.IT BLOG (Apr. 5, 2016), <https://blog.slock.it/deja-vu-dai-smart-contracts-audit-results-d26bc088e32e>.



that would provide DAO Token holders a return on investment. The various promotional materials disseminated by Slock.it's co-founders touted that DAO Token holders would receive "rewards," which the White Paper defined as, "any [ETH] received by a DAO [Entity] generated from projects the DAO [Entity] funded." DAO Token holders would then vote to either use the rewards to fund new projects or to distribute the ETH to DAO Token holders.

From April 30, 2016 through May 28, 2016 (the "Offering Period"), The DAO offered and sold DAO Tokens. Investments in The DAO were made "pseudonymously" (i.e., an individual's or entity's pseudonym was their Ethereum Blockchain address). To purchase a DAO Token offered for sale by The DAO, an individual or entity sent ETH from their Ethereum Blockchain address to an Ethereum Blockchain address associated with The DAO. All of the ETH raised in the offering as well as any future profits earned by The DAO were to be pooled and held in The DAO's Ethereum Blockchain address. The token price fluctuated in a range of approximately 1 to 1.5 ETH per 100 DAO Tokens, depending on when the tokens were purchased during the Offering Period. Anyone was eligible to purchase DAO Tokens (as long as they paid ETH). There were no limitations placed on the number of DAO Tokens offered for sale, the number of purchasers of DAO Tokens, or the level of sophistication of such purchasers.

DAO Token holders were not restricted from re-selling DAO Tokens acquired in the offering, and DAO Token holders could sell their DAO Tokens in a variety of ways in the secondary market and thereby monetize their investment as discussed below. Prior to the Offering Period, Slock.it solicited at least one U.S. web-based platform to trade DAO Tokens on its system and, at the time of the offering, The DAO Website and other promotional materials disseminated by Slock.it included representations that DAO Tokens would be available for secondary market trading after the Offering Period via several platforms. During the Offering Period and afterwards, the Platforms posted notices on their own websites and on social media that each planned to support secondary market trading of DAO Tokens.<sup>20</sup>

In addition to secondary market trading on the Platforms, after the Offering Period, DAO Tokens were to be freely transferable on the Ethereum Blockchain. DAO Token holders would also be permitted to redeem their DAO Tokens for ETH through a complicated, multi-week (approximately 46-day) process referred to as a DAO Entity "split."<sup>21</sup>

## 2. *Participants in The DAO*

According to the White Paper, in order for a project to be considered for funding with "a DAO [Entity]'s [ETH]," a "Contractor" first must submit a proposal to the DAO Entity. Specifically, DAO Token holders expected Contractors to submit proposals for projects that could provide DAO Token holders returns on their investments. Submitting a proposal to The DAO involved: (1) writing a smart contract, and then deploying and publishing it on the

<sup>20</sup> The Platforms are registered with FinCEN as "Money Services Businesses" and provide systems whereby customers may exchange virtual currencies for other virtual currencies or fiat currencies.

<sup>21</sup> According to the White Paper, the primary purpose of a split is to protect minority shareholders and prevent what is commonly referred to as a "51% Attack," whereby an attacker holding 51% of a DAO Entity's Tokens could create a proposal to send all of the DAO Entity's funds to himself or herself.



Ethereum Blockchain; and (2) posting details about the proposal on The DAO Website, including the Ethereum Blockchain address of the deployed contract and a link to its source code. Proposals could be viewed on The DAO Website as well as other publicly-accessible websites. Per the White Paper, there were two prerequisites for submitting a proposal. An individual or entity must: (1) own at least one DAO Token; and (2) pay a deposit in the form of ETH that would be forfeited to the DAO Entity if the proposal was put up for a vote and failed to achieve a quorum of DAO Token holders. It was publicized that Slock.it would be the first to submit a proposal for funding.<sup>22</sup>

ETH raised by The DAO was to be distributed to a Contractor to fund a proposal only on a majority vote of DAO Token holders.<sup>23</sup> DAO Token holders were to cast votes, which would be weighted by the number of tokens they controlled, for or against the funding of a specific proposal. The voting process, however, was publicly criticized in that it could incentivize distorted voting behavior and, as a result, would not accurately reflect the consensus of the majority of DAO Token holders. Specifically, as noted in a May 27, 2016 blog post by a group of computer security researchers, The DAO's structure included a "strong positive bias to vote YES on proposals and to suppress NO votes as a side effect of the way in which it restricts users' range of options following the casting of a vote."<sup>24</sup>

Before any proposal was put to a vote by DAO Token holders, it was required to be reviewed by one or more of The DAO's "Curators." At the time of the formation of The DAO, the Curators were a group of individuals chosen by Slock.it.<sup>25</sup> According to the White Paper, the Curators of a DAO Entity had "considerable power." The Curators performed crucial security functions and maintained ultimate control over which proposals could be submitted to, voted on, and funded by The DAO. As stated on The DAO Website during the Offering Period, The DAO relied on its Curators for "failsafe protection" and for protecting The DAO from "malicious [sic] actors." Specifically, per The DAO Website, a Curator was responsible for: (1) confirming that any proposal for funding originated from an identifiable person or organization; and (2)

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<sup>22</sup> It was stated on The DAO Website and elsewhere that Slock.it anticipated that it would be the first to submit a proposal for funding. In fact, a draft of Slock.it's proposal for funding for an "Ethereum Computer and Universal Sharing Network" was publicly-available online during the Offering Period.

<sup>23</sup> DAO Token holders could vote on proposals, either by direct interaction with the Ethereum Blockchain or by using an application that interfaces with the Ethereum Blockchain. It was generally acknowledged that DAO Token holders needed some technical knowledge in order to submit a vote, and The DAO Website included a link to a step-by-step tutorial describing how to vote on proposals.

<sup>24</sup> By voting on a proposal, DAO Token holders would "tie up" their tokens until the end of the voting cycle. *See Jentzsch, supra* note 8 at 8 ("The tokens used to vote will be blocked, meaning they can not [sic] be transferred until the proposal is closed."). If, however, a DAO Token holder abstained from voting, the DAO Token holder could avoid these restrictions; any DAO Tokens not submitted for a vote could be withdrawn or transferred at any time. As a result, DAO Token holders were incentivized either to vote yes or to abstain from voting. *See* Dino Mark et al., *A Call for a Temporary Moratorium on The DAO*, HACKING, DISTRIBUTED (May 27, 2016, 1:35 PM), <http://hackingdistributed.com/2016/05/27/dao-call-for-moratorium/>.

<sup>25</sup> At the time of The DAO's launch, The DAO Website identified eleven "high profile" individuals as holders of The DAO's Curator "Multisig" (or "private key"). These individuals all appear to live outside of the United States. Many of them were associated with the Ethereum Foundation, and The DAO Website touted the qualifications and trustworthiness of these individuals.

confirming that smart contracts associated with any such proposal properly reflected the code the Contractor claims to have deployed on the Ethereum Blockchain. If a Curator determined that the proposal met these criteria, the Curator could add the proposal to the “whitelist,” which was a list of Ethereum Blockchain addresses that could receive ETH from The DAO if the majority of DAO Token holders voted for the proposal.

Curators of The DAO had ultimate discretion as to whether or not to submit a proposal for voting by DAO Token holders. Curators also determined the order and frequency of proposals, and could impose subjective criteria for whether the proposal should be whitelisted. One member of the group chosen by Slock.it to serve collectively as the Curator stated publicly that the Curator had “complete control over the whitelist ... the order in which things get whitelisted, the duration for which [proposals] get whitelisted, when things get unwhitelisted ... [and] clear ability to control the order and frequency of proposals,” noting that “curators have tremendous power.”<sup>26</sup> Another Curator publicly announced his subjective criteria for determining whether to whitelist a proposal, which included his personal ethics.<sup>27</sup> Per the White Paper, a Curator also had the power to reduce the voting quorum requirement by 50% every other week. Absent action by a Curator, the quorum could be reduced by 50% only if no proposal had reached the required quorum for 52 weeks.

### 3. *Secondary Market Trading on the Platforms*

During the period from May 28, 2016 through early September 2016, the Platforms became the preferred vehicle for DAO Token holders to buy and sell DAO Tokens in the secondary market using virtual or fiat currencies. Specifically, the Platforms used electronic systems that allowed their respective customers to post orders for DAO Tokens on an anonymous basis. For example, customers of each Platform could buy or sell DAO Tokens by entering a market order on the Platform’s system, which would then match with orders from other customers residing on the system. Each Platform’s system would automatically execute these orders based on pre-programmed order interaction protocols established by the Platform.

None of the Platforms received orders for DAO Tokens from non-Platform customers or routed its respective customers’ orders to any other trading destinations. The Platforms publicly displayed all their quotes, trades, and daily trading volume in DAO Tokens on their respective websites. During the period from May 28, 2016 through September 6, 2016, one such Platform executed more than 557,378 buy and sell transactions in DAO Tokens by more than 15,000 of its U.S. and foreign customers. During the period from May 28, 2016 through August 1, 2016, another such Platform executed more than 22,207 buy and sell transactions in DAO Tokens by more than 700 of its U.S. customers.

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<sup>26</sup> Epicenter, *EB134 – Emin Gün Sirer And Vlad Zamfir: On A Rocky DAO*, YOUTUBE (June 6, 2016), <https://www.youtube.com/watch?v=ON5GhIQdFU8>.

<sup>27</sup> Andrew Quentson, *Are the DAO Curators Masters or Janitors?*, THE COIN TELEGRAPH (June 12, 2016), <https://cointelegraph.com/news/are-the-dao-curators-masters-or-janitors>.

#### 4. *Security Concerns, The “Attack” on The DAO, and The Hard Fork*

In late May 2016, just prior to the expiration of the Offering Period, concerns about the safety and security of The DAO’s funds began to surface due to vulnerabilities in The DAO’s code. On May 26, 2016, in response to these concerns, Slock.it submitted a “DAO Security Proposal” that called for the development of certain updates to The DAO’s code and the appointment of a security expert.<sup>28</sup> Further, on June 3, 2016, Christoph Jentzsch, on behalf of Slock.it, proposed a moratorium on all proposals until alterations to The DAO’s code to fix vulnerabilities in The DAO’s code had been implemented.<sup>29</sup>

On June 17, 2016, an unknown individual or group (the “Attacker”) began rapidly diverting ETH from The DAO, causing approximately 3.6 million ETH—1/3 of the total ETH raised by The DAO offering—to move from The DAO’s Ethereum Blockchain address to an Ethereum Blockchain address controlled by the Attacker (the “Attack”).<sup>30</sup> Although the diverted ETH was then held in an address controlled by the Attacker, the Attacker was prevented by The DAO’s code from moving the ETH from that address for 27 days.<sup>31</sup>

In order to secure the diverted ETH and return it to DAO Token holders, Slock.it’s co-founders and others endorsed a “Hard Fork” to the Ethereum Blockchain. The “Hard Fork,” called for a change in the Ethereum protocol on a going forward basis that would restore the DAO Token holders’ investments as if the Attack had not occurred. On July 20, 2016, after a majority of the Ethereum network adopted the necessary software updates, the new, forked Ethereum Blockchain became active.<sup>32</sup> The Hard Fork had the effect of transferring all of the funds raised (including those held by the Attacker) from The DAO to a recovery address, where DAO Token holders could exchange their DAO Tokens for ETH.<sup>33</sup> All DAO Token holders

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<sup>28</sup> See Stephan Tual, *Proposal #1-DAO Security, Redux*, SLOCK.IT BLOG (May 26, 2016), <https://blog.slock.it/both-our-proposals-are-now-out-voting-starts-saturday-morning-ba322d6d3aea>. The unnamed security expert would “act as the first point of contact for security disclosures, and continually monitor, pre-empt and avert any potential attack vectors The DAO may face, including social, technical and economic attacks.” *Id.* Slock.it initially proposed a much broader security proposal that included the formation of a “DAO Security” group, the establishment of a “Bug Bounty Program,” and routine external audits of The DAO’s code. However, the cost of the proposal (125,000 ETH), which would be paid from The DAO’s funds, was immediately criticized as too high and Slock.it decided instead to submit the revised proposal described above. See Stephan Tual, *DAO.Security, a Proposal to guarantee the integrity of The DAO*, SLOCK.IT BLOG (May 25, 2016), <https://blog.slock.it/dao-security-a-proposal-to-guarantee-the-integrity-of-the-dao-3473899ace9d>.

<sup>29</sup> See *TheDAO Proposal\_ID 5*, ETHERSCAN, <https://etherscan.io/token/thedao-proposal/5>.

<sup>30</sup> See Stephan Tual, *DAO Security Advisory: live updates*, SLOCK.IT BLOG (June 17, 2016), <https://blog.slock.it/dao-security-advisory-live-updates-2a0a42a2d07b>.

<sup>31</sup> *Id.*

<sup>32</sup> A minority group, however, elected not to adopt the new Ethereum Blockchain created by the Hard Fork because to do so would run counter to the concept that a blockchain is immutable. Instead they continued to use the former version of the blockchain, which is now known as “Ethereum Classic.”

<sup>33</sup> See Christoph Jentzsch, *What the ‘Fork’ Really Means*, SLOCK.IT BLOG (July 18, 2016), <https://blog.slock.it/what-the-fork-really-means-6fe573ac31dd>.

who adopted the Hard Fork could exchange their DAO Tokens for ETH, and avoid any loss of the ETH they had invested.<sup>34</sup>

### III. Discussion

The Commission is aware that virtual organizations and associated individuals and entities increasingly are using distributed ledger technology to offer and sell instruments such as DAO Tokens to raise capital. These offers and sales have been referred to, among other things, as “Initial Coin Offerings” or “Token Sales.” Accordingly, the Commission deems it appropriate and in the public interest to issue this Report in order to stress that the U.S. federal securities law may apply to various activities, including distributed ledger technology, depending on the particular facts and circumstances, without regard to the form of the organization or technology used to effectuate a particular offer or sale. In this Report, the Commission considers the particular facts and circumstances of the offer and sale of DAO Tokens to demonstrate the application of existing U.S. federal securities laws to this new paradigm.

#### A. Section 5 of the Securities Act

The registration provisions of the Securities Act contemplate that the offer or sale of securities to the public must be accompanied by the “full and fair disclosure” afforded by registration with the Commission and delivery of a statutory prospectus containing information necessary to enable prospective purchasers to make an informed investment decision. Registration entails disclosure of detailed “information about the issuer’s financial condition, the identity and background of management, and the price and amount of securities to be offered ...” *SEC v. Cavanagh*, 1 F. Supp. 2d 337, 360 (S.D.N.Y. 1998), *aff’d*, 155 F.3d 129 (2d Cir. 1998). “The registration statement is designed to assure public access to material facts bearing on the value of publicly traded securities and is central to the Act’s comprehensive scheme for protecting public investors.” *SEC v. Aaron*, 605 F.2d 612, 618 (2d Cir. 1979) (citing *SEC v. Ralston Purina Co.*, 346 U.S. 119, 124 (1953)), *vacated on other grounds*, 446 U.S. 680 (1980). Section 5(a) of the Securities Act provides that, unless a registration statement is in effect as to a security, it is unlawful for any person, directly or indirectly, to engage in the offer or sale of securities in interstate commerce. Section 5(c) of the Securities Act provides a similar prohibition against offers to sell, or offers to buy, unless a registration statement has been filed. Thus, both Sections 5(a) and 5(c) of the Securities Act prohibit the unregistered offer or sale of securities in interstate commerce. 15 U.S.C. § 77e(a) and (c). Violations of Section 5 do not require scienter. *SEC v. Universal Major Indus. Corp.*, 546 F.2d 1044, 1047 (2d Cir. 1976).

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<sup>34</sup> *Id.*

## B. DAO Tokens Are Securities

### 1. *Foundational Principles of the Securities Laws Apply to Virtual Organizations or Capital Raising Entities Making Use of Distributed Ledger Technology*

Under Section 2(a)(1) of the Securities Act and Section 3(a)(10) of the Exchange Act, a security includes “an investment contract.” *See* 15 U.S.C. §§ 77b-77c. An investment contract is an investment of money in a common enterprise with a reasonable expectation of profits to be derived from the entrepreneurial or managerial efforts of others. *See SEC v. Edwards*, 540 U.S. 389, 393 (2004); *SEC v. W.J. Howey Co.*, 328 U.S. 293, 301 (1946); *see also United Housing Found., Inc. v. Forman*, 421 U.S. 837, 852-53 (1975) (The “touchstone” of an investment contract “is the presence of an investment in a common venture premised on a reasonable expectation of profits to be derived from the entrepreneurial or managerial efforts of others.”). This definition embodies a “flexible rather than a static principle, one that is capable of adaptation to meet the countless and variable schemes devised by those who seek the use of the money of others on the promise of profits.” *Howey*, 328 U.S. at 299 (emphasis added). The test “permits the fulfillment of the statutory purpose of compelling full and fair disclosure relative to the issuance of ‘the many types of instruments that in our commercial world fall within the ordinary concept of a security.’” *Id.* In analyzing whether something is a security, “form should be disregarded for substance,” *Tcherepnin v. Knight*, 389 U.S. 332, 336 (1967), “and the emphasis should be on economic realities underlying a transaction, and not on the name appended thereto.” *United Housing Found.*, 421 U.S. at 849.

### 2. *Investors in The DAO Invested Money*

In determining whether an investment contract exists, the investment of “money” need not take the form of cash. *See, e.g., Uselton v. Comm. Lovelace Motor Freight, Inc.*, 940 F.2d 564, 574 (10th Cir. 1991) (“[I]n spite of *Howey*’s reference to an ‘investment of money,’ it is well established that cash is not the only form of contribution or investment that will create an investment contract.”).

Investors in The DAO used ETH to make their investments, and DAO Tokens were received in exchange for ETH. Such investment is the type of contribution of value that can create an investment contract under *Howey*. *See SEC v. Shavers*, No. 4:13-CV-416, 2014 WL 4652121, at \*1 (E.D. Tex. Sept. 18, 2014) (holding that an investment of Bitcoin, a virtual currency, meets the first prong of *Howey*); *Uselton*, 940 F.2d at 574 (“[T]he ‘investment’ may take the form of ‘goods and services,’ or some other ‘exchange of value.’”) (citations omitted).

### 3. *With a Reasonable Expectation of Profits*

Investors who purchased DAO Tokens were investing in a common enterprise and reasonably expected to earn profits through that enterprise when they sent ETH to The DAO’s Ethereum Blockchain address in exchange for DAO Tokens. “[P]rofits” include “dividends, other periodic payments, or the increased value of the investment.” *Edwards*, 540 U.S. at 394. As described above, the various promotional materials disseminated by Slock.it and its co-founders informed investors that The DAO was a for-profit entity whose objective was to fund



projects in exchange for a return on investment.<sup>35</sup> The ETH was pooled and available to The DAO to fund projects. The projects (or “contracts”) would be proposed by Contractors. If the proposed contracts were whitelisted by Curators, DAO Token holders could vote on whether The DAO should fund the proposed contracts. Depending on the terms of each particular contract, DAO Token holders stood to share in potential profits from the contracts. Thus, a reasonable investor would have been motivated, at least in part, by the prospect of profits on their investment of ETH in The DAO.

4. *Derived from the Managerial Efforts of Others*

a. The Efforts of Slock.it, Slock.it’s Co-Founders, and The DAO’s Curators Were Essential to the Enterprise

Investors’ profits were to be derived from the managerial efforts of others—specifically, Slock.it and its co-founders, and The DAO’s Curators. The central issue is “whether the efforts made by those other than the investor are the undeniably significant ones, those essential managerial efforts which affect the failure or success of the enterprise.” *SEC v. Glenn W. Turner Enters., Inc.*, 474 F.2d 476, 482 (9th Cir. 1973). The DAO’s investors relied on the managerial and entrepreneurial efforts of Slock.it and its co-founders, and The DAO’s Curators, to manage The DAO and put forth project proposals that could generate profits for The DAO’s investors.

Investors’ expectations were primed by the marketing of The DAO and active engagement between Slock.it and its co-founders with The DAO and DAO Token holders. To market The DAO and DAO Tokens, Slock.it created The DAO Website on which it published the White Paper explaining how a DAO Entity would work and describing their vision for a DAO Entity. Slock.it also created and maintained other online forums that it used to provide information to DAO Token holders about how to vote and perform other tasks related to their investment. Slock.it appears to have closely monitored these forums, answering questions from DAO Token holders about a variety of topics, including the future of The DAO, security concerns, ground rules for how The DAO would work, and the anticipated role of DAO Token holders. The creators of The DAO held themselves out to investors as experts in Ethereum, the blockchain protocol on which The DAO operated, and told investors that they had selected persons to serve as Curators based on their expertise and credentials. Additionally, Slock.it told investors that it expected to put forth the first substantive profit-making contract proposal—a blockchain venture in its area of expertise. Through their conduct and marketing materials, Slock.it and its co-founders led investors to believe that they could be relied on to provide the significant managerial efforts required to make The DAO a success.

Investors in The DAO reasonably expected Slock.it and its co-founders, and The DAO’s Curators, to provide significant managerial efforts after The DAO’s launch. The expertise of The DAO’s creators and Curators was critical in monitoring the operation of The DAO, safeguarding investor funds, and determining whether proposed contracts should be put for a

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<sup>35</sup> That the “projects” could encompass services and the creation of goods for use by DAO Token holders does not change the core analysis that investors purchased DAO Tokens with the expectation of earning profits from the efforts of others.

vote. Investors had little choice but to rely on their expertise. At the time of the offering, The DAO's protocols had already been pre-determined by Slock.it and its co-founders, including the control that could be exercised by the Curators. Slock.it and its co-founders chose the Curators, whose function it was to: (1) vet Contractors; (2) determine whether and when to submit proposals for votes; (3) determine the order and frequency of proposals that were submitted for a vote; and (4) determine whether to halve the default quorum necessary for a successful vote on certain proposals. Thus, the Curators exercised significant control over the order and frequency of proposals, and could impose their own subjective criteria for whether the proposal should be whitelisted for a vote by DAO Token holders. DAO Token holders' votes were limited to proposals whitelisted by the Curators, and, although any DAO Token holder could put forth a proposal, each proposal would follow the same protocol, which included vetting and control by the current Curators. While DAO Token holders could put forth proposals to replace a Curator, such proposals were subject to control by the current Curators, including whitelisting and approval of the new address to which the tokens would be directed for such a proposal. In essence, Curators had the power to determine whether a proposal to remove a Curator was put to a vote.<sup>36</sup>

And, Slock.it and its co-founders did, in fact, actively oversee The DAO. They monitored The DAO closely and addressed issues as they arose, proposing a moratorium on all proposals until vulnerabilities in The DAO's code had been addressed and a security expert to monitor potential attacks on The DAO had been appointed. When the Attacker exploited a weakness in the code and removed investor funds, Slock.it and its co-founders stepped in to help resolve the situation.

#### b. DAO Token Holders' Voting Rights Were Limited

Although DAO Token holders were afforded voting rights, these voting rights were limited. DAO Token holders were substantially reliant on the managerial efforts of Slock.it, its co-founders, and the Curators.<sup>37</sup> Even if an investor's efforts help to make an enterprise profitable, those efforts do not necessarily equate with a promoter's significant managerial efforts or control over the enterprise. *See, e.g., Glenn W. Turner*, 474 F.2d at 482 (finding that a multi-level marketing scheme was an investment contract and that investors relied on the promoter's managerial efforts, despite the fact that investors put forth the majority of the labor that made the enterprise profitable, because the promoter dictated the terms and controlled the scheme itself); *Long v. Shultz*, 881 F.2d 129, 137 (5th Cir. 1989) ("An investor may authorize the assumption of particular risks that would create the possibility of greater profits or losses but still depend on a third party for all of the essential managerial efforts without which the risk could not

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<sup>36</sup> DAO Token holders could put forth a proposal to split from The DAO, which would result in the creation of a new DAO Entity with a new Curator. Other DAO Token holders would be allowed to join the new DAO Entity as long as they voted yes to the original "split" proposal. Unlike all other contract proposals, a proposal to split did not require a deposit or a quorum, and it required a seven-day debating period instead of the minimum two-week debating period required for other proposals.

<sup>37</sup> Because, as described above, DAO Token holders were incentivized either to vote yes or to abstain from voting, the results of DAO Token holder voting would not necessarily reflect the actual view of a majority of DAO Token holders.



pay off.”). *See also generally SEC v. Merchant Capital, LLC*, 483 F.3d 747 (11th Cir. 2007) (finding an investment contract even where voting rights were provided to purported general partners, noting that the voting process provided limited information for investors to make informed decisions, and the purported general partners lacked control over the information in the ballots).

The voting rights afforded DAO Token holders did not provide them with meaningful control over the enterprise, because (1) DAO Token holders’ ability to vote for contracts was a largely perfunctory one; and (2) DAO Token holders were widely dispersed and limited in their ability to communicate with one another.

First, as discussed above, DAO Token holders could only vote on proposals that had been cleared by the Curators.<sup>38</sup> And that clearance process did not include any mechanism to provide DAO Token holders with sufficient information to permit them to make informed voting decisions. Indeed, based on the particular facts concerning The DAO and the few draft proposals discussed in online forums, there are indications that contract proposals would not have necessarily provide enough information for investors to make an informed voting decision, affording them less meaningful control. For example, the sample contract proposal attached to the White Paper included little information concerning the terms of the contract. Also, the Slock.it co-founders put forth a draft of their own contract proposal and, in response to questions and requests to negotiate the terms of the proposal (posted to a DAO forum), a Slock.it founder explained that the proposal was intentionally vague and that it was, in essence, a take it or leave it proposition not subject to negotiation or feedback. *See, e.g., SEC v. Shields*, 744 F.3d 633, 643-45 (10th Cir. 2014) (in assessing whether agreements were investment contracts, court looked to whether “the investors actually had the type of control reserved under the agreements to obtain access to information necessary to protect, manage, and control their investments at the time they purchased their interests.”).

Second, the pseudonymity and dispersion of the DAO Token holders made it difficult for them to join together to effect change or to exercise meaningful control. Investments in The DAO were made pseudonymously (such that the real-world identities of investors are not apparent), and there was great dispersion among those individuals and/or entities who were invested in The DAO and thousands of individuals and/or entities that traded DAO Tokens in the secondary market—an arrangement that bears little resemblance to that of a genuine general partnership. *Cf. Williamson v. Tucker*, 645 F.2d 404, 422-24 (5th Cir. 1981) (“[O]ne would not expect partnership interests sold to large numbers of the general public to provide any real partnership control; at some point there would be so many [limited] partners that a partnership vote would be more like a corporate vote, each partner’s role having been diluted to the level of a single shareholder in a corporation.”).<sup>39</sup> Slock.it did create and maintain online forums on which

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<sup>38</sup> Because, in part, The DAO never commenced its business operations funding projects, this Report does not analyze the question whether anyone associated with The DAO was an “[i]nvestment adviser” under Section 202(a)(11) of the Investment Advisers Act of 1940 (“Advisers Act”). *See* 15 U.S.C. § 80b-2(a)(11). Those who would use virtual organizations should consider their obligations under the Advisers Act.

<sup>39</sup> The Fifth Circuit in *Williamson* stated that:

investors could submit posts regarding contract proposals, which were not limited to use by DAO Token holders (anyone was permitted to post). However, DAO Token holders were pseudonymous, as were their posts to the forums. Those facts, combined with the sheer number of DAO Token holders, potentially made the forums of limited use if investors hoped to consolidate their votes into blocs powerful enough to assert actual control. This was later demonstrated through the fact that DAO Token holders were unable to effectively address the Attack without the assistance of Slock.it and others. The DAO Token holders' pseudonymity and dispersion diluted their control over The DAO. *See Merchant Capital*, 483 F.3d at 758 (finding geographic dispersion of investors weighing against investor control).

These facts diminished the ability of DAO Token holders to exercise meaningful control over the enterprise through the voting process, rendering the voting rights of DAO Token holders akin to those of a corporate shareholder. *Steinhardt Group, Inc. v. Citicorp.*, 126 F.3d 144, 152 (3d Cir. 1997) ("It must be emphasized that the assignment of nominal or limited responsibilities to the participant does not negate the existence of an investment contract; where the duties assigned are so narrowly circumscribed as to involve little real choice of action ... a security may be found to exist ... [The] emphasis must be placed on economic reality.") (citing *SEC v. Koscot Interplanetary, Inc.*, 497 F.2d 473, 483 n. 14 (5th Cir. 1974)).

By contract and in reality, DAO Token holders relied on the significant managerial efforts provided by Slock.it and its co-founders, and The DAO's Curators, as described above. Their efforts, not those of DAO Token holders, were the "undeniably significant" ones, essential to the overall success and profitability of any investment into The DAO. *See Glenn W. Turner*, 474 F.2d at 482.

#### C. Issuers Must Register Offers and Sales of Securities Unless a Valid Exemption Applies

The definition of "issuer" is broadly defined to include "every person who issues or proposes to issue any security" and "person" includes "any unincorporated organization." 15 U.S.C. § 77b(a)(4). The term "issuer" is flexibly construed in the Section 5 context "as issuers devise new ways to issue their securities and the definition of a security itself expands." *Doran v. Petroleum Mgmt. Corp.*, 545 F.2d 893, 909 (5th Cir. 1977); accord *SEC v. Murphy*, 626 F.2d 633, 644 (9th Cir. 1980) ("[W]hen a person [or entity] organizes or sponsors the organization of

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A general partnership or joint venture interest can be designated a security if the investor can establish, for example, that (1) an agreement among the parties leaves so little power in the hands of the partner or venture that the arrangement in fact distributes power as would a limited partnership; or (2) the partner or venturer is so inexperienced and unknowledgeable in business affairs that he is incapable of intelligently exercising his partnership or venture powers; or (3) the partner or venturer is so dependent on some unique entrepreneurial or managerial ability of the promoter or manager that he cannot replace the manager of the enterprise or otherwise exercise meaningful partnership or venture powers.

*Williamson*, 645 F.2d at 424 & n.15 (court also noting that, "this is not to say that other factors could not also give rise to such a dependence on the promoter or manager that the exercise of partnership powers would be effectively precluded.").

limited partnerships and is primarily responsible for the success or failure of the venture for which the partnership is formed, he will be considered an issuer ...”).

The DAO, an unincorporated organization, was an issuer of securities, and information about The DAO was “crucial” to the DAO Token holders’ investment decision. *See Murphy*, 626 F.2d at 643 (“Here there is no company issuing stock, but instead, a group of individuals investing funds in an enterprise for profit, and receiving in return an entitlement to a percentage of the proceeds of the enterprise.”) (citation omitted). The DAO was “responsible for the success or failure of the enterprise,” and accordingly was the entity about which the investors needed information material to their investment decision. *Id.* at 643-44.

During the Offering Period, The DAO offered and sold DAO Tokens in exchange for ETH through The DAO Website, which was publicly-accessible, including to individuals in the United States. During the Offering Period, The DAO sold approximately 1.15 billion DAO Tokens in exchange for a total of approximately 12 million ETH, which was valued in USD, at the time, at approximately \$150 million. Because DAO Tokens were securities, The DAO was required to register the offer and sale of DAO Tokens, unless a valid exemption from such registration applied.

Moreover, those who participate in an unregistered offer and sale of securities not subject to a valid exemption are liable for violating Section 5. *See, e.g., Murphy*, 626 F.2d at 650-51 (“[T]hose who ha[ve] a necessary role in the transaction are held liable as participants.”) (citing *SEC v. North Am. Research & Dev. Corp.*, 424 F.2d 63, 81 (2d Cir. 1970); *SEC v. Culpepper*, 270 F.2d 241, 247 (2d Cir. 1959); *SEC v. International Chem. Dev. Corp.*, 469 F.2d 20, 28 (10th Cir. 1972); *Pennaluna & Co. v. SEC*, 410 F.2d 861, 864 n.1, 868 (9th Cir. 1969)); *SEC v. Softpoint, Inc.*, 958 F. Supp 846, 859-60 (S.D.N.Y. 1997) (“The prohibitions of Section 5 ... sweep[] broadly to encompass ‘any person’ who participates in the offer or sale of an unregistered, non-exempt security.”); *SEC v. Chinese Consol. Benevolent Ass’n.*, 120 F.2d 738, 740-41 (2d Cir. 1941) (defendant violated Section 5(a) “because it engaged in selling unregistered securities” issued by a third party “when it solicited offers to buy the securities ‘for value’”).

D. A System that Meets the Definition of an Exchange Must Register as a National Securities Exchange or Operate Pursuant to an Exemption from Such Registration

Section 5 of the Exchange Act makes it unlawful for any broker, dealer, or exchange, directly or indirectly, to effect any transaction in a security, or to report any such transaction, in interstate commerce, unless the exchange is registered as a national securities exchange under Section 6 of the Exchange Act, or is exempted from such registration. *See* 15 U.S.C. §78e. Section 3(a)(1) of the Exchange Act defines an “exchange” as “any organization, association, or group of persons, whether incorporated or unincorporated, which constitutes, maintains, or provides a market place or facilities for bringing together purchasers and sellers of securities or for otherwise performing with respect to securities the functions commonly performed by a stock exchange as that term is generally understood ...” 15 U.S.C. § 78c(a)(1).

Exchange Act Rule 3b-16(a) provides a functional test to assess whether a trading system meets the definition of exchange under Section 3(a)(1). Under Exchange Act Rule 3b-16(a), an

organization, association, or group of persons shall be considered to constitute, maintain, or provide “a marketplace or facilities for bringing together purchasers and sellers of securities or for otherwise performing with respect to securities the functions commonly performed by a stock exchange,” if such organization, association, or group of persons: (1) brings together the orders for securities of multiple buyers and sellers; and (2) uses established, non-discretionary methods (whether by providing a trading facility or by setting rules) under which such orders interact with each other, and the buyers and sellers entering such orders agree to the terms of the trade.<sup>40</sup>

A system that meets the criteria of Rule 3b-16(a), and is not excluded under Rule 3b-16(b), must register as a national securities exchange pursuant to Sections 5 and 6 of the Exchange Act<sup>41</sup> or operate pursuant to an appropriate exemption. One frequently used exemption is for alternative trading systems (“ATS”).<sup>42</sup> Rule 3a1-1(a)(2) exempts from the definition of “exchange” under Section 3(a)(1) an ATS that complies with Regulation ATS,<sup>43</sup> which includes, among other things, the requirement to register as a broker-dealer and file a Form ATS with the Commission to provide notice of the ATS’s operations. Therefore, an ATS that operates pursuant to the Rule 3a1-1(a)(2) exemption and complies with Regulation ATS would not be subject to the registration requirement of Section 5 of the Exchange Act.

The Platforms that traded DAO Tokens appear to have satisfied the criteria of Rule 3b-16(a) and do not appear to have been excluded from Rule 3b-16(b). As described above, the Platforms provided users with an electronic system that matched orders from multiple parties to buy and sell DAO Tokens for execution based on non-discretionary methods.

#### IV. Conclusion and References for Additional Guidance

Whether or not a particular transaction involves the offer and sale of a security—regardless of the terminology used—will depend on the facts and circumstances, including the

<sup>40</sup> See 17 C.F.R. § 240.3b-16(a). The Commission adopted Rule 3b-16(b) to exclude explicitly certain systems that the Commission believed did not meet the exchange definition. These systems include systems that merely route orders to other execution facilities and systems that allow persons to enter orders for execution against the bids and offers of a single dealer system. See Securities Exchange Act Rel. No. 40760 (Dec. 8, 1998), 63 FR 70844 (Dec. 22, 1998) (Regulation of Exchanges and Alternative Trading Systems) (“Regulation ATS”), 70852.

<sup>41</sup> 15 U.S.C. § 78e. A “national securities exchange” is an exchange registered as such under Section 6 of the Exchange Act. 15 U.S.C. § 78f.

<sup>42</sup> Rule 300(a) of Regulation ATS promulgated under the Exchange Act provides that an ATS is:

any organization, association, person, group of persons, or system: (1) [t]hat constitutes, maintains, or provides a market place or facilities for bringing together purchasers and sellers of securities or for otherwise performing with respect to securities the functions commonly performed by a stock exchange within the meaning of [Exchange Act Rule 3b-16]; and (2) [t]hat does not: (i) [s]et rules governing the conduct of subscribers other than the conduct of subscribers’ trading on such [ATS]; or (ii) [d]iscipline subscribers other than by exclusion from trading.

Regulation ATS, *supra* note 40, Rule 300(a).

<sup>43</sup> See 17 C.F.R. § 240.3a1-1(a)(2). Rule 3a1-1 also provides two other exemptions from the definition of “exchange” for any ATS operated by a national securities association, and any ATS not required to comply with Regulation ATS pursuant to Rule 301(a) of Regulation ATS. See 17 C.F.R. §§ 240.3a1-1(a)(1) and (3).

economic realities of the transaction. Those who offer and sell securities in the United States must comply with the federal securities laws, including the requirement to register with the Commission or to qualify for an exemption from the registration requirements of the federal securities laws. The registration requirements are designed to provide investors with procedural protections and material information necessary to make informed investment decisions. These requirements apply to those who offer and sell securities in the United States, regardless whether the issuing entity is a traditional company or a decentralized autonomous organization, regardless whether those securities are purchased using U.S. dollars or virtual currencies, and regardless whether they are distributed in certificated form or through distributed ledger technology. In addition, any entity or person engaging in the activities of an exchange, such as bringing together the orders for securities of multiple buyers and sellers using established non-discretionary methods under which such orders interact with each other and buyers and sellers entering such orders agree upon the terms of the trade, must register as a national securities exchange or operate pursuant to an exemption from such registration.

To learn more about registration requirements under the Securities Act, please visit the Commission's website [here](#). To learn more about the Commission's registration requirements for investment companies, please visit the Commission's website [here](#). To learn more about the Commission's registration requirements for national securities exchanges, please visit the Commission's website [here](#). To learn more about alternative trading systems, please see the Regulation ATS adopting release [here](#).

For additional guidance, please see the following Commission enforcement actions involving virtual currencies:

- *SEC v. Trendon T. Shavers and Bitcoin Savings and Trust*, Civil Action No. 4:13-CV-416 (E.D. Tex., complaint filed July 23, 2013)
- *In re Erik T. Voorhees*, Rel. No. 33-9592 (June 3, 2014)
- *In re BTC Trading, Corp. and Ethan Burnside*, Rel. No. 33-9685 (Dec. 8, 2014)
- *SEC v. Homero Joshua Garza, Gaw Miners, LLC, and ZenMiner, LLC (d/b/a Zen Cloud)*, Civil Action No. 3:15-CV-01760 (D. Conn., complaint filed Dec. 1, 2015)
- *In re Bitcoin Investment Trust and SecondMarket, Inc.*, Rel. No. 34-78282 (July 11, 2016)
- *In re Sunshine Capital, Inc.*, File No. 500-1 (Apr. 11, 2017)

And please see the following investor alerts:

- *Bitcoin and Other Virtual Currency-Related Investments* (May 7, 2014)
- *Ponzi Schemes Using Virtual Currencies* (July 2013)

By the Commission.

# EXHIBIT 5

By then, blockchain was beginning to pique the interest of large financial institutions for its potential to help cut costs of cumbersome back-office processes, such as the clearing and settlement of securities trades. Tezos' 37-page business plan called it "an Internet for financial transactions" and said the technology could be used to automate the over-the-counter derivatives trading market.

But Breitman failed to attract backers. He told Reuters in June that he blamed his fundraising failures on the decision to develop the technology first, rather than just selling "a dream" as other blockchain startups were doing.

"I guess I was a terrible salesman as well," he said.

"I can speak to that," his wife said.

Kathleen Breitman, co-founder & CEO of Tezos, participates in the panel discussion "Creating \$200 Million Out of the Ether" at the 2017 Forbes Under 30 Summit in Boston, Massachusetts, U.S., October 2, 2017. REUTERS/Brian Snyder

In April 2016, Arthur left Morgan Stanley, and by that September, the Breitmans had started working on a new strategy for Tezos – to conduct an online fundraiser to distribute digital tokens, whose holders would maintain the Tezos blockchain. But the couple needed funds to keep the project going.

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Over the next six months, they received \$612,000 from 10 early backers, including several cryptocurrency hedge funds, according to the Tezos.com website.

To conduct the ICO, the Breitmans chose a complex structure. Earlier this year, they helped to create a foundation based in Zug, Switzerland – dubbed “Crypto Valley” because of its many blockchain startups – that is seeking not-for-profit status, emails show. The idea, according to documents on the Tezos website, was that the foundation would raise money via the ICO, then acquire DLS, the Breitman-controlled company that has been developing Tezos.

Working through a Swiss foundation, the Breitmans thought, would provide regulatory oversight but not too much. Kathleen Breitman told Reuters in June that she and her husband opted to use a foundation based in Zug because Switzerland has “a regulatory authority that had a sufficient amount of oversight but not like anything too crazy.”

Georg von Schnurbein, co-author of a book on Swiss foundation governance, expressed surprise over cryptocurrency ventures like Tezos setting up not-for-profit foundations in Switzerland. “For me, the public interest is not clear,” he said. While not illegal, he said, creating a foundation with the aim of allowing inventors to profit from a sale conflicted with its status as a not-for-profit, which is supposed to benefit the public. He said federal regulators eventually might prohibit it.

“The issue that there is some kind of for-profit entity and there are transfers right at the beginning is something that is working at the moment, but won’t be sustainable,” he said.

“EXAGGERATED, TO SAY THE LEAST”

As work continued for the ICO, which was originally scheduled to be held in May, the project started running out of cash, Kathleen Breitman told Reuters. She spoke

with Tim Draper, the well-known founding partner of Silicon Valley venture capital firm DFJ and a staunch bitcoin supporter. He invested \$1.5 million through his firm, Draper Associates, which included taking a minority stake in DLS, the company that controls the Tezos source code.

The Breitmans had also hired Strange Brew Strategies, a U.S. communications company, to promote their project, and Reuters wrote a news story on May 5 about Draper's involvement.

In pitching the story to Reuters, John O'Brien, a principal of Strange Brew, had made claims about Tezos' progress. He wrote: "The applications of Tezos, ranging from derivatives settlement to micro-insurance, are real and recognized by industry giants. Ernst & Young, Deloitte, LexiFi, etc. have adopted Tezos in their development environments and labs."

On Oct. 3, a spokeswoman for the accounting firm Ernst & Young told Reuters: "The statement is not correct. EY has not adopted Tezos." A spokesman for Deloitte said Tezos' code is "one of many technologies we're considering" with blockchain, but it's "still early stage and we haven't used the technology for a client project."

Jean-Marc Eber, CEO of the French software company LexiFi, said, "The sentence, as stated, isn't accurate and unfortunately exaggerated, to say the least." While there had been "informal contacts," he said, "at this stage, LexiFi has not adopted Tezos' technology in its development environment or labs."

Strange Brew declined to answer questions about the statement.

## INVESTMENT OR DONATION?

Slideshow (9 Images)

The Tezos fundraiser began on July 1. The Breitmans had wide-ranging expectations about how much they might raise. A document on Tezos.com suggested that if they received more than \$20 million, they might use it to “negotiate with a small nation-state” to adopt Tezzies, or acquire mainstream print and TV media outlets to promote the technology. In June, Kathleen Breitman told Reuters that about a year ago, when the price of bitcoin was lower, “we were like, ‘Hey, we would be lucky if we get 20 million.’”

When it ended after 13 days, the project received about 66,000 bitcoins and 361,000 ethers, worth about \$232 million at the time. The hoard is now worth about twice that.

Kathleen Breitman told Reuters that participating in the Tezos fundraiser was like contributing to a public television station and receiving “a tote bag” in return. “That’s kind of the same thing here,” she said.

The fundraiser’s terms called the contributions “a non-refundable donation” and not a “speculative investment.”

If deemed a donation, and not a security, the funds raised might not fall under the remit of financial regulators in the United States. In the U.S., investments in assets such as company shares and other securities are regulated by the Securities and Exchange Commission. The SEC has been studying ICOs, and in July issued an investor bulletin that warned: “Depending on the facts and circumstances of each individual ICO, the virtual coins or tokens that are offered or sold may be securities.”

Part of the SEC’s assessment is to examine the reasonable expectations of participants in the ICO. Some participants in the Tezos fundraiser told Reuters they viewed the coins at least partly as an investment.

Kevin Zhou, co-founder of the cryptocurrency trading fund Galois Capital, said he invested about five bitcoins in Tezos, which he considers overall one of the better ICOs.

“For me and for a lot of people this is an investment. We are looking for a return,” Zhou said. “I don’t really care about” using the Tezos technology, he added.

Draper told Reuters that cryptocurrencies are commodities like pork bellies, and characterized acquiring Tezzies as a purchase rather than a donation. Asked this month how much he donated during the Tezos fundraiser, he replied via email, “You mean how much I bought? A lot.”

“TOTAL MENSCH”

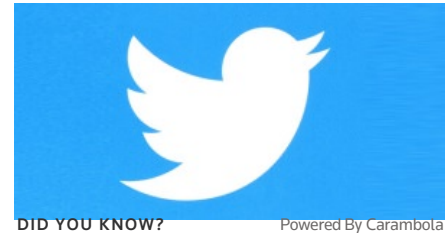
At the moment, the Tezos Foundation holds all of the fundraising proceeds, while the Breitmans, through their Delaware company, control much of Tezos’ intellectual property. The plan is for the foundation to acquire the Breitmans’ company and release the technology under a free software license, according a “Transparency Memo” on the Tezos website.

Gevers, who founded the Tezos Foundation, said it has a contract that stipulates the Breitmans will either sell the Delaware company to the foundation “within a reasonable point of time” or, if they don’t, “the foundation can take it.” He declined to provide a copy of the contract.

When the foundation will acquire the Breitmans’ company remains unclear. Kathleen Breitman told Reuters in June, “Essentially, you know, they’re going to buy out the company in like July or so, I guess.”

The Breitmans stand to receive millions of dollars if the deal goes through. According to the “Transparency Memo,” the new blockchain “must launch and operate successfully” for three months, then DLS’s shareholders – the Breitmans and Draper – are entitled to receive 8.5 percent of the fundraiser proceeds in cash. That amount,

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according to Gevers, is about \$19.7 million. The shareholders also are slated to receive another 10 percent of the Tezzies issued, with the coin distribution spread out over four years. Those coins currently are worth about \$140 million in futures trading.

Prior to the fundraiser, Kathleen Breitman effused about Gevers, 52, a Zug-based South African entrepreneur who has never before run a foundation. During an “Ask Me Anything” session in May on an online chat channel, she posted: “He’s awesome. Total mensch and very philosophically committed to our project.”

Relations later soured. The Breitmans objected to people the foundation suggested it wanted to hire, Gevers said. Another sticking point: The couple’s company hasn’t relinquished control over the foundation’s own website, [www.tezos.ch](http://www.tezos.ch).

“They control the foundation’s domains, websites and email servers, so the foundation has no control or confidentiality in its own communications,” Gevers said.

The Breitmans officially have no role at the Tezos Foundation. The letter from their lawyer this week proposed the creation of two foundation subsidiaries – Tezos AG and Tezos France SA – to develop and support Tezos, with the Breitmans serving as chief executive and chief technology officer of Tezos AG. The couple also would be given “observer status” on the foundation board. The foundation would then “limit” its activities to supervising and supporting the subsidiaries, “rather than conducting any direct operations.”

According to von Schnurbein, under Swiss law “the foundation is completely independent and the foundation board is completely independent.” Gevers said the foundation wants the couple to continue playing a leading advisory role. “They are both very competent people and obviously they started this whole thing. And it would be stupid to exclude them.”

But he added: “You can rest assured as long as I have anything to do with this, the foundation will be independent.”

Gevers said he has filed a complaint with Swiss regulators about the request he received via email this week from the foundation’s two other board members that he step down from the board for a month. A spokesman for Switzerland’s Federal Department of Home Affairs, which oversees the agency that supervises foundations, told Reuters that asking a board member to step aside must be done at a board meeting, not via email. The two board members who emailed Gevers didn’t respond to a request for comment.

As for the hundreds of millions of dollars’ worth of cryptocurrencies raised in the ICO, Gevers said the foundation has slowly begun selling the virtual currencies – lately about \$10.2 million worth a week – and plans to invest the proceeds in a diverse portfolio. The funds are intended to be used to run the foundation, ensure Tezos works and help to develop products using the technology.

So where are all the bitcoins and ethers raised in the ICO stored? That, Gevers said, was confidential.

“These are not held in any one place,” he said, “but secured through high-security” digital wallets “that no single party has control over.”

## ICO Frenzy

Initial Coin Offerings have raised record amounts this year.



# EXHIBIT 6



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# Tezos

## A new digital commonwealth

Tezos is a new decentralized blockchain that governs itself by establishing a true digital commonwealth. It facilitates formal verification, a technique which mathematically proves the correctness of the code governing transactions and boosts the security of the most sensitive or financially weighted smart contracts. [Learn more](#)

[Learn more about the Tezos Foundation and the fundraiser](#)


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The Tezos fundraiser is closed.



65,703

XBT






361,122

ETH

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# EXHIBIT 7

11/25/2017

Tezos Crowdfunding - DLS

# Transparency memo

In the interest of full transparency and the spirit of [Tezos' values](#), Tezos would like to share important details about the relationship between two entities: Dynamic Ledger Solutions, Inc. and the Tezos Foundation. It includes information about the use of contributed funds by the Foundation, thus we urge contributors in the Tezos fundraiser to read and understand it.

## Background on DLS and the Tezos Foundation

Dynamic Ledger Solutions, Inc. (DLS) is a US-based company currently controlled by its founders, Kathleen & Arthur Breitman. It owns all of the Tezos-related intellectual property (IP), including the source code of the Tezos cryptographic ledger, logos, and trademark applications associated with the name Tezos, domain names, and goodwill arising from a set of a relationships with several contractors and potential customers in the financial technology market.

The Tezos Foundation (the Foundation) is a Swiss foundation based in Zug. Its directors are Johann Gevers, Diego Ponz, and Guido Schmitz-Krummacher. As a legal entity, it operates independently from DLS, though DLS advises the Foundation closely on technology.

## Contractual Agreement & Risk Mitigation

The Foundation and DLS have negotiated a contractual agreement in which the Foundation will acquire DLS and release its IP under a free software license (MIT license). In the process, the Foundation will also acquire DLS' existing business relationships with contractors and potential customers, as well as its trademark applications and domain names. This transaction is structured as an earnout, which means the price paid will depend on future performance metrics. Earnouts are common in corporate acquisitions in order to limit risks for buyers.

DLS has taken proactive steps to limit the Foundation's risk in this acquisition, specifically:

- The Tezos blockchain must launch and operate successfully as a public blockchain for a period of three months before DLS' shareholders can receive any compensation for

11/25/2017

Tezos Crowdfunding - DLS

their shares.

- It must work substantially as described in our white paper and technical papers and be consistent with the features described to the community prior to the fundraiser.

Only at this point, and not before, DLS shareholders may exercise the right to receive payment for their shares.

#### Payment Structure and Contrast to Common fundraising practices

It has become common in fundraisers, or in token generation events (TGEs) for founders of entities selling tokens to reward themselves, in addition to their token allocation, via salaries with little or no accountability and oversight and in a manner that doesn't reflect the viability of their product.

In contrast, payments to DLS are contractually prescribed via the following criteria, which are being shared publicly and in advance of the fundraiser:

- No payment will be made unless and until the terms in the preceding section of this document have been met.
- Once met, DLS' shareholders will receive 8.5% of the contributions made during the fundraiser.
- In addition, DLS' shareholders will receive a 10% allocation of the tokens in the genesis block, placed in a smart contract that will vest monthly over a period of 48 months.

These criteria represent a far more transparent and equitable reflection of the reality of the transaction.

#### Rationale for the Compensation Structure

1. Tezos has been in development for over three years and was entirely self-funded until very recently September of 2016. When we finally accepted a few pre-orders, we spent over 80% of the funds on paying developers, and the rest on marketing and legal fees. Over the past three years DLS' shareholders have never received any compensation for their work on Tezos, or even leased an office.
2. Too small of a token issuance meant DLS's shareholders wouldn't be properly incentivized to grow the network. Too big of a token issuance would give them a disproportionate amount of control over the network, especially given the built-in governance features. We split the reward in order to balance this tradeoff.
3. Tezos wants to foster the creation of multiple, decentralized core development teams who will compete for endowment by the Foundation. Relying on future largesses of the Foundation to reward past work is an impedance mismatch, and thus not optimal for inviting competition.

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# EXHIBIT 8



At this rate, raising half a billion dollars is not unimaginable.

**SEE ALSO: [The ICO is a revolutionary new way to get funded, and everyone wants in](#)**

Unlike many other recent ICOs, Tezos is not based on Ethereum. Instead, it operates on an entirely new blockchain, a "self-amending cryptolledger" that rewards developers who upgrade the network's protocols and allows for "seamless," consensual upgrades of those protocols (read the [white paper](#) here for a lot more detail). This makes it a competitor to Ethereum.

Tezos tokens, Tezzies or XTZs, can be purchased with both Bitcoin and Ethereum. And purchased they are: At the time of this writing, Tezos has raised 52,795 BTC and 269,118 ETH, for a total of over \$206 million at current prices. This already makes the Tezos ICO the largest in history (overshadowing the recent [Bancor ICO](#), which raised \$153 million, as well as the [EOS ICO](#), which raised \$185 million in five days).

Here's another important point: unlike many recent ICOs, the Tezos ICO is uncapped, meaning there's no upper limit of funds the company can raise. The only limit is time, and with approximately 8 days and 14 hours to go, the ultimate amount Tezos will raise will likely be a lot bigger than it is now.

# EXHIBIT 9



above noted *potential* problems. The recipe is there, a failed execution can be recovered by outside parties with interest in doing so (perhaps funded by Tim Draper, if need be), and the spirit of Satoshi is alive and well within the founders.

## Investment Details

The initial cost of each Tez, the base token, is intended to be around one cent each. It seems the initial funding goal, therefore, was 10 billion cents, or \$100 million. Instead, there will be no specific goal, and development will continue regardless of the amount raised. Coins will subsequently be distributed to the world through the sale of them at exchanges, one assumes, because in order to recoup at least their initial investment, investors will need to sell coins. Every "cycle," which is defined as "about three months" and is based on a mathematical formula, interest of  $\square 512$  will be awarded to staking stakeholders who have the requisite amount of coins to mint blocks ( $\square 1536$ ). This will happen every minute or so, and any staker has a chance of minting the next block.

The Tezos Foundation, which is separate from Dynamic Ledger Solutions and is based in Switzerland, will oversee the actual crowdsale which begins on May 22<sup>nd</sup>, 2017. While the original idea was to raise a penny per  $\square$ , the crowdsale price will actually be  $\square 5000$  per Bitcoin – today that means a price of about 36 cents each. You can buy as much as you want. If you want to stake, you'll need at least 1536 of them, as mentioned above. That would cost you about \$560 or .3 bitcoins. You can currently sign up for e-mail alerts, but the open sale will be conducted by Bitcoin Suisse AG and information on the specifics will become available on the 22<sup>nd</sup>.

*Important: Never invest money you can't afford to lose. Always do your own research and due diligence before placing a trade. Read our Terms & Conditions [here](#)*

# EXHIBIT 10

# Why I'm investing in the Tezos ICO despite my concerns

alao <sup>(60)</sup> ▾ (@alao) in cryptocurrency (/trending/cryptocurrency) • 5 months ago

---

The Tezos ICO (<https://www.tezos.com/>) will go live on July 1st and despite some reservations I'm going to invest in it.



## Quick Background

Tezos is a self-amending blockchain that has been built from scratch and developed for the past 3 years. It is the brainchild of husband and wife team the Breitman's.

**Kathleen Breitman**

# EXHIBIT 11



zooko

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Founder & CEO at The Zcash Company (<https://z.cash>); Founder & Advisor at Least Authority (<https://LeastAuthority.com>)

Jun 29 · 2 min read

## Why I'm advising Tezos

*This disclosure note was written by copying and editing [Why I'm advising the "Basic Attention Token" \(BAT\) team](#).*

Quite a while back, I agreed to serve as an advisor to the Tezos team. This blog post is to state why.

*But first, I want to emphasize that this does not constitute a recommendation that you participate in the upcoming Tezos crowdfunding.* People sometimes ask me for investment advice, but I never give investment advice. I always just say:

- Never risk more money than you can afford to lose, on something new.
- Never invest in something you don't understand.

(Also see this [investment advice from Fred Wilson](#).)

I will receive \$25,000 worth of Tezzies (Tezos tokens) in return for my service as advisor, half upon launch and half a year later. I will not buy any Tezzies myself in the sale, because I don't have time to think about such decisions! (If I had time to think about such things, I'd probably use Fred Wilson's recommendation of dollar cost averaging.)

### So why am I agreeing to serve as an advisor?

The core idea of Tezos—formalized and automated governance of a decentralized protocol—is a deeply powerful idea, and I want to see it implemented and deployed, in the hopes that it can greatly help humanity.

The Tezos leadership team of Kathleen and Arthur Breitman are people that I know and trust. Kathleen has given me valuable business help

# EXHIBIT 12



Vote for CoinDesk's Most Influential People in Blockchain 2017

## \$232 Million: Tezos Blockchain Project Finishes Record-Setting Token Sale

Stan Higgins   
 Jul 13, 2017 at 10:36 UTC

NEWS

The Tezos blockchain project has completed its initial coin offering, or ICO, bringing in a record-smashing \$232m-worth of bitcoin and ether.

At close, Tezos had netted 65,627 BTC (worth roughly \$156m at current [prices](#)) and 361,122 ETH ([worth](#) about \$76m). The crowdsale, which didn't have a cap on the total amount of tokens sold, began on July 1, and was timed with the passage of 2,000 transaction blocks on the bitcoin network.

The total represents the most collected via an ICO to date, topping the amount raised by Bancor, a platform for launching new blockchain tokens, which [raised \\$150m](#) at then-current prices in mid-June.

At its heart, Tezos tackles the question of governance and development in the context of a decentralized network composed of different entities with possibly varying incentives and goals. The project has been described in the past as a "self-amending" blockchain, given that one of its central concepts is the ability for network-wide changes to be decided upon at the protocol level by stakeholders.

In a conversation with CoinDesk earlier this year, Tezos co-founder and technology chief Arthur Breitman explained that those mechanics would act as a kind of "rule of law" that could work to prevent conflicts like the [ethereum blockchain split](#) following the collapse of the smart-contract funding vehicle [The DAO](#) last summer.

He told CoinDesk in February:

*"What we're trying to bring, in some sense, is a rule of law that is, OK, if we have to have these changes because the network needs to evolve, at least we need to have a clear, decentralized procedure for making those changes."*

When launched, Tezos will support smart contracts, using proof-of-stake as a [consensus algorithm](#). With proof-of-stake, validators essentially set aside a portion of their tokens to increase their chances of being chosen to create the next block of transactions.

### The team

Tezos, co-founded by Breitman and his wife, Kathleen, has been in development since mid-2014, when the project's white paper and position paper were first published.

Kathleen, who is CEO of the project, previously worked as senior strategy associate for distributed ledger startup R3CEV, according to her [LinkedIn](#) profile, a role she took after spending close to two years with professional services firm Accenture.

Arthur, per [LinkedIn](#), served as a vice president for Morgan Stanley between 2013 and 2016, working as a portfolio manager for New York-based family office White Bay Group before that.

Supporting the project is the Tezos Foundation, which is based in the city of Zug, Switzerland. The group is one of a number of blockchain-focused entities to make their home in Zug, which has emerged as a [hub](#) for the industry within Europe.

According to an [overview](#) for the Tezos crowdsale, the foundation — distinct from Dynamic Ledger Solutions, the startup that developed the project — will help

**Ex. 12 - Pg. 82**



# EXHIBIT 13

11/26/2017

Tim Draper: There Was Nothing Secretive About Our Purchase of Tezos

By Cyril Gilson

# Tim Draper: There Was Nothing Secretive About Our Purchase of Tezos

11990 Total views 277 Total shares



ICO WATCH

On Oct. 22, Cointelegraph published our contributor Nick Ayton's opinion piece called "[What Lessons Can Be Learnt From Tezos ICO Debacle](#)." The piece asked questions regarding the situation with the Tezos's ICO, the companies, foundations and persons that participated in it.

It has recently been reported that a San Diego legal firm is considering [filing a class action lawsuit](#) on behalf of some US investors against the company Dynamic Ledger Solutions, Inc. that, as the law firm suggests, is holding the rights to the Tezos network.

Our aim is serving the crypto community, for which the question of raising money for Blockchain projects is vital. That's why we consider the issues relating to the security and trust during [ICOs](#) as being of utmost importance.

In his opinion piece, Nick Ayton has asked questions about the sale, Tim Draper's role in it, why was the Tezos token not registered with the SEC, raising corresponding issues. Again, regardless of Nick Ayton's interpreting and questioning certain actors' actions and motives, the piece was clearly marked as "opinion" and should be considered as such. Cointelegraph's [Terms of service agreement](#) clearly underlines that: "the opinions of authors and other contributors are their own and should not be taken as financial advice...All materials on this site are for informational purposes only. None of the material should be interpreted as investment advice."

## Tim Draper's statement

Mr. Draper has made a valuable comment regarding the article which, being faithful to the standards of journalism ethics, we are happy to publish in full:

*"This was brought to my attention. Please get your facts straight. My fund is a long-term investor and holder of tokens. I back promising entrepreneurs with the prospect of transforming society for the good of the customer. There was nothing secretive about our purchase of Tezos. We invested for ownership in the company, which at the time was two bright young people and an idea. The sale might not have happened at all! We also participated in the Pre-sale. Most ICO founders earn tokens over time. All tokens we hope to receive that we didn't buy in the Pre-sale (alongside with all the other investors who participated) will vest over time with the founders' tokens. I have no intention of selling these tokens because I am a true believer in the Tezos mission: to build a Blockchain on proof of stake and open it up for developers to build and invent on a new and more relevant platform. It can be faster and more energy efficient than existing solutions. It can have a hand in transforming everything from healthcare to the insurance industry to real estate to government. Arthur and Cathleen are dedicated, honest and brilliant founders. They made it clear to me and the other purchasers that the token would require time to develop. If they are successful, they might just transform society, and we will all be better off as a result, and then, maybe 5 or ten years down the road, my investors and I might get rich. I expect a full retraction. And I think you should send Arthur and Cathleen some flowers and an apology."*

11/26/2017

Tim Draper: There Was Nothing Secretive About Our Purchase of Tezos

Should the comments from Mr. Johann Gevers, Mr. and Mrs. Arthur and Cathleen Breitmans be forthcoming, we'll be happy to publish them in all fairness.

# EXHIBIT 14



ArthurB

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Mar 20 · 4 min read

## Tezos: Philosophy and Values

This is meant to be a concise guide to the principles and values we hope to see embodied by the Tezos network. A longer, more detailed version of this list will be released later on this spring.

### 3.7 Formal verification

An explicit goal of the Tezos project is to fully formalize the protocol. We rely on strong typing, pure functions and all the tools and techniques which allow for easier reasoning about the code.

### 3.8 Rich protocol

To consolidate the economic value of the token, we seek to include a set of valuable features of general interest at the protocol level, such as smart contracts.

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## Introduction

**Ex. 14 - Pg. 87**

Tezos is a security-minded, future-proof smart contract system. Because Tezos has a built-in governance mechanism, its protocol can evolve and incorporate new innovations over time. In other words, stakeholders can make and enforce decisions about changes to the network using the network itself.

Despite the existence of this governance mechanism, some decisions will inevitably arise at a level that cannot be fully addressed within the network. To help in resolving those decisions and to provide a clear picture of our aims with the Tezos project, we are publishing this list of the general principles and values we wish to preserve at the “meta-governance” level. Principles are listed in order of precedence.

## Principles

Principles are the moral code that governs the Tezos network. They represent the core beliefs, the foundational concepts, upon which Tezos is built.

### Non-dogmatism

We value hard rules and will follow them to their natural conclusion, but not to their *absurd* conclusion. We believe in being consistent, but not *foolishly* consistent.

### Non-aggression

Regardless of its other goals, the Tezos governance mechanism should not be used to initiate force or fraud against others, either directly or through the use of a third party.

### Use of the governance mechanism

All protocol changes should go through the Tezos internal governance mechanism when possible. If a person or party introduces a change via a hard fork, but that change could easily have been instigated inside of Tezos, we will reject that change and treat it as illegitimate.

### Preserving the interest of token holders

The goal of our governance mechanism is to protect the interest of each token holder, irrespective of their stake, in their capacity as a token holder (this doesn't mean that it should protect all of the possible interests of any person who happens to hold tokens, only those interests

that pertain to token ownership). Generally speaking, this means favoring decisions that tend toward increasing the value of the tokens. Not only does this directly benefit token holders, but it also acts as a proxy for the most desirable properties, such as security, fairness, or usefulness.

## Values

Values are more flexible than principles. If you think of principles as Tezos' moral code, the following values are its personality.

### Nuanced pragmatism

Building on the principle of non-dogmatism, our design choices are meant to be means towards engendering our values. For example, we are not interested in decentralization for its own sake but for the sake of censorship resistance. Similarly, we do not hold votes for the sake of voting itself but for the sake of reaching decisions which are unlikely to be challenged and tend to align with the token holder's interest.

While we embrace new and creative ways to embody our values, innovations should derive from an attitude of circumspection rather than fecklessness. Political representation and decentralization are powerful heuristics carrying precious knowledge. We should think hard before departing from their prescriptions.

### Evolution, not revolution

Our ability to amend almost all aspects of the ledger is not a carte blanche to change the protocol willy-nilly. Our goal is to provide a clear governance framework to supervise protocol evolution, not to take a cavalier attitude towards these changes.

### Commerce

Embracing open source and making volunteer contributions to collective projects does not preclude us from embracing markets, commerce, and profit-making. Tezos' decentralized governance mechanism gives it the ability to reward contributors.

### Kindness

Tezos will grow faster and stronger if we project a positive and inclusive image and ignore the trolls. As the Persian proverb notes: The dogs may



bark, but the caravan goes on.

## **Valuing scholars**

We pay close attention to scholars and are proactive in incorporating their work. If research clearly establishes the benefits of a particular approach, we embrace it. Not all scholars are academics, and not all academics are scholars.

## **Innovation and stability**

The value of any cryptographic token today represents a binary bet between its future irrelevance or its massive success. We aspire to protect a minimal core of functionality in order to preserve the token's resiliency but, beyond that level, innovate wildly in order to maximize its utility and its odds of success.

## **Formal verification**

An explicit goal of the Tezos project is to fully formalize and verify the protocol. We rely on strong typing, pure functions and all the programming techniques which allow for easier reasoning about the code.

## **Rich protocol**

To consolidate the economic value of the token, we seek to incorporate the most valuable features of general interest at the protocol level, rather than through smart contracts.

# EXHIBIT 15

14: Kathleen Breitman — Tezos Unleashed – RRE Ventures Perspectives

the papers you've put out actually give clear and well-thought out answers to some of these mainstream public questions. I want to get into a few of them. The first thing I want to ask is about the pushback over the fact that the fundraiser is uncapped. Uncapped meaning there's no upper limit on the funds you can raise. The limit is just the time, the window in which you're raising—two weeks. In the Tezos overview you state the reason for this which I will read here:

*"There is no cap on the amount of contributions that will be accepted. This is done in order to ensure that participation is not limited only to insiders or the fast fingered. The Tezos team believes that an uncapped fundraiser will promote a widespread distribution of the tokens a necessary prerequisite to launching a robust network."*

So that inclusive argument instinctively makes sense to me. But of course the problem with democracy is democracy. The system itself. Crowds don't always get things right and in this case your crowd may be speculators. There's been a lot of speculative buying in China for instance. Do you worry about who the tokenholders are and whether their incentives are aligned with Tezos?

KB: It's tough. We didn't do much marketing outside of the U.S. Well rather Arthur and I are based in the U.S. and we talk about the technology in mainstream U.S. press outlets and sometimes it's picked up in Asian outlets. We mostly have just been evangelizing about the technology. But certainly there are a lot of people who are interested in the more speculative aspects. I think there's a lot of fervor and froth in the marketplace right now. That does make it a bit odd to launch something that's more community-based on some level when there's a lot of people who are just profit-seeking. I suppose I do worry but ultimately we're appealing to people's rational self-interest. So at the end of the day I hope that the proper incentives will align themselves.

AMLG: And that the tokens end up in the right hands, with people who align with your values?

# EXHIBIT 16

**We have been working on tackling the root of the slowdown for a while and, now that we are nearing a resolution, we can share what's been going on.**

The Tezos project has been the work of two entities. DLS, a company we (Arthur & Kathleen) co-founded to develop the technology, and the Tezos Foundation, a Swiss based non-profit foundation created to foster the development and adoption of the Tezos protocol. We supported the creation of an independent foundation in order to provide transparency and accountability over the use of funds. To that end, neither of us sits on the board of the foundation.

At the time of the fundraiser, the Tezos foundation took over the responsibility of financing the development of the Tezos ecosystem. The role of the foundation was to provide oversight, transparency, and financial controls, ensuring that funds were properly directed towards the growth of the Tezos project and ecosystem.

From the outset, we worked nonstop to make the transition as smooth as possible, making suggestions to the foundation to help them continue the work we had been doing. However, getting anything done proved difficult. Recruiting came to a standstill and communications to the community languished waiting for approval.

In early September we became aware that the president of the Tezos Foundation, Johann Gevers, engaged in an attempt at self-dealing, misrepresenting to the council the value of a bonus he attempted to grant himself. We have been working with the Tezos foundation to resolve the matter and have advocated for his removal from the foundation council. We are confident in the council's ability to handle this sensitive matter with care and diligence. In the meantime, Johann's operational role in the foundation has been suspended, pending an investigation by the council's auditor.

Up to this point, we have respected the confidentiality of this matter at the request of the foundation council, so as not to let a media uproar become a distraction during deliberations.

Based on our discussions with the other council members, we are optimistic that they will be taking further steps to improve governance in several ways:

# EXHIBIT 17

CORPORATIONS &amp; INSTITUTIONS

INDIVIDUAL INVESTORS

ACTIVE ICO



CLIENTS

TEAM

CONTACT

CAREERS

# Statement concerning the Tezos Crowd Contribution and the Tezos Foundation

**13th of November 2017**

In recent weeks there have been reports in various media outlets and publications of differences of opinion and governance issues in regards to the Tezos Foundation internally as well as its founders. Due to this, many of our clients and concerned contributors, participators and stakeholders from the Tezos Crowd Contribution have asked us to make a public statement on the topic.

Bitcoin Suisse AG (BTCSAG) acted as a crypto-financial service provider and intermediary in connection with the Tezos Crowd Contribution earlier this year, providing services to both individual contributors as well as the Tezos Foundation itself. Since the conclusion of the Crowd Contribution, BTCSAG has continued to provide crypto-financial services to the Tezos Foundation, including acting as a mandatory co-signatory on all crypto-asset transactions.

The terms for contribution in the Tezos Crowd Contribution (document: 'Tezos Contribution and XTZ Allocation Terms and Explanatory Notes') to which each contributor agreed in order to participate in the Crowd Contribution, specified that refunds post-contribution and after the close of crowd contribution would not be possible, due to both regulatory reasons as well as practical reasons.

For any potential change in this policy we refer to the Tezos Foundation as BTCSAG in its role as a crypto-financial service provider and intermediary is not part of the agreement between contributors and the Tezos Foundation, except on points which fall under the framework agreement for participation through BTCSAG.

It is not the place of BTCSAG to comment on matters internal the Tezos organization. All such questions should be answered by the Tezos Foundation. Instead we refer to the framework contract for participating in the Tezos Crowd Contribution through BTCSAG which every contributor accepted during the Crowd Contribution when onboarding through BTCSAG, as well as the Terms for participation in the Crowd Contribution from the side of the Tezos Foundation, mentioned above.

From the side of BTCSAG, we made it perfectly clear that Contribution towards the project was to be considered a highly risky proposition, even underlining this fact.



BTCSAG will naturally stand by its commitments towards all of our clients which were contributors in the Tezos Crowd Sale as well as the Tezos Foundation itself.

BTCSAG is currently not aware of any evidence that Contributor funds have been mismanaged, lost or are put at risk by the Tezos Foundation nor any party involved in the project.

BTCSAG also states that to the best of our knowledge, Ether (ETH) held by the Tezos Foundation, are unaffected from the recent issues regarding Parity multi-signature wallets.

We consider it likely that the Tezos project will suffer delays as a result of the internal differences. Nevertheless the crypto assets which were collected through the Crowd Contribution, while to a minor extent hedged/liquidated against various fiat currencies at this stage, for the most part are still being held by the Tezos Foundation with BTCSAG acting as a mandatory co-signatory service provider. As previously stated, to our current knowledge, no funds have been lost, mismanaged, stolen – nor would it seem they are at risk hereof.

Thus from the best of our knowledge, the Tezos Foundation remains one of the most well funded blockchain projects in the history of decentralized services, its current internal issues and disagreements notwithstanding.

**/Niklas Nikolajsen**

CEO – **Bitcoin Suisse AG**

# EXHIBIT 18

## Conclusion

Tezos could potentially be one of the largest ICOs of 2017.

Frequent comparisons to the likes of Ethereum and Dash have already fuelled substantial demand for the token as many speculative investors are unwilling to miss out on what could be a very successful project by as early as December this year.

We are attracted to the following:

- The project dates back to 2014 (meaning this is not a concept cash grab)
- Management have a significant history in banking and financial markets
- The technology has a unique value proposition associated with governance and security
- It has outspoken and sizeable backing from real investors

Given management's history, their chance of commercializing Tezos to a point where it has market penetration appears to be sufficient.

We do draw some concern from the choice to uncap the raising amount as this can 'muddy the waters' when it comes to specific capital allocation post-ICO.

We also believe that the 20% allocation of tokens to the Foundation and DLS may possibly be a liquidity event for the founders, although a vesting period is specified (monthly over four years).

In conclusion, Tezos represents a **speculative buying opportunity** for investors seeking exposure to a new (yet to be released) venture that holds a sufficient level of intellectual property. We acknowledge that investors participating in the initial sale will not be able to close positions until launch, however we believe that Tezos will attract substantial speculative market liquidity in the market once listed.